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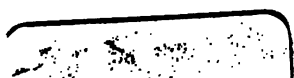
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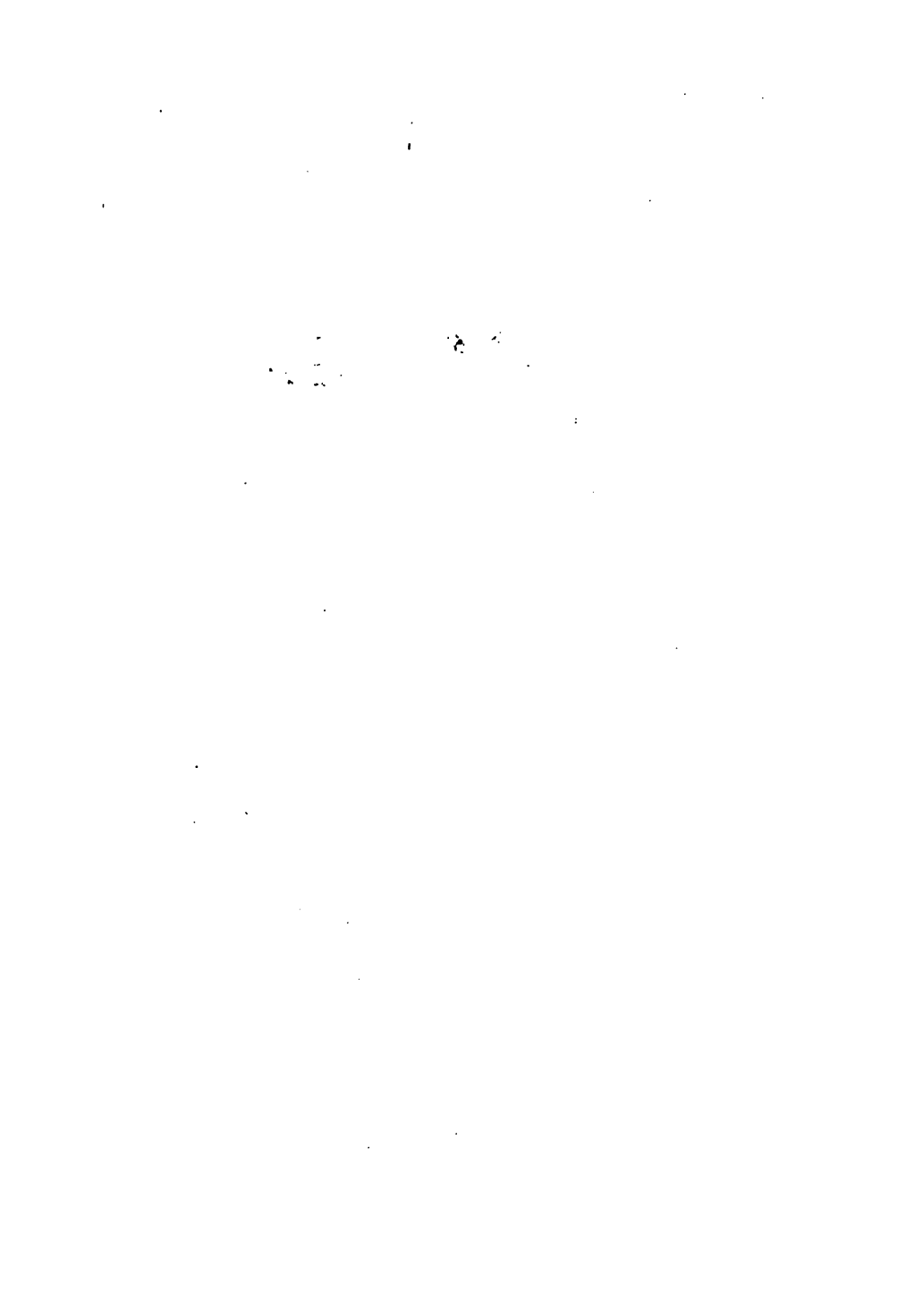
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Geology Unmasked.







AN EXPLANATION

OF

THE AUTHOR'S OPINIONS

ON

GEOLOGY:

SHOWING THE FALLACY OF THE EXTREME BELIEVER IN THAT SO-CALLED
SCIENCE, AND HOW CONTRADICTORY GEOLOGY IS WHEN
COMPARED WITH THE BIBLE.

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GEOLGY.

MY opinion of Geology has been for a long time that the extreme errors in that science are so conducive to draw the mind of young believers in geology from the thorough belief of the holy Scriptures, because they are so utterly averse to each other that no reasonable person can cling to both, he is soon convinced that one or the other must be wrong. I am of the same opinion respecting geology and the holy Scriptures agreeing with each other as our Saviour Jesus Christ said in his Sermon on the Mount, *Matthew* vi. c., 24th v., "No man can serve two masters, for either he will hate the one and love the other, or else he will hold to the one and despise the other; ye cannot serve God and Mammon." This noble remark of our Saviour's I find true in almost every instance where I have come in contact or had any argument with a thorough believer in the science of geology, because they cling so firmly to the deluding and fascinating principles of the science, and they become so much attached to it that, when attacked

strongly, sooner than waver from their idol belief, they are tempted by the examples of great professors to suffer anything sooner than acknowledge that any part of the science is in error. I have had such astounding proofs of these facts that I am sorry to say a great many, and almost in every instance (where they have come in contact with me), have thorough believers in geology acknowledged that they do not believe the holy Scriptures. The young geologist generally begins by disowning the truth of the four first chapters of *Genesis*, written by Moses, and as he farther advances he finds the Old Testament interferes with the science; and I can positively vouch that some thorough believers in geology have told me point blank that the Scriptures are not true, but geology is true. They say for an excuse that they would sooner believe the evidence of their senses by what they can see in the rocks and strata of the earth than believe the Scriptures, because the science of geology (say they) gives them every proof that the holy Bible is not truthfully recorded; they fancy the Bible to be a composition of imaginary facts, concocted by good men to improve and moralise the world—being only conducive to social enjoyment; now, I have in my limited experience ascertained the above facts, and finding that the science is making rapid progress and leading a great many astray, by first reading their works and then conversing with believers, till ultimately they become confirmed geolo-

gists ; which they will find very difficult to undo, after the beguiling influence and the many advantages that it shows have taken possession of their frail understanding. Now this is the primary cause of my undertaking this work, and I shall endeavour to warn my fellow-countrymen of the dangers besetting them in that innocent-looking science, which has proved the ruin of so many souls ; no doubt but hundreds will have cause to trace the first seeds of disbelief in the holy Scriptures engraved in their hearts through meddling with that dangerous and useless science, Geology ; from my experience it seems all bad, and no good whatever likely to be derived from the useless labours of the geologist. The great amount of energy, talent, and money that is yearly wasted with no hope of success, viz., of ever finding out the hidden secret of the works of creation, would be a blessing if applied to some better and more hopeful purpose ; the geologists have wasted hundreds of years trying to find out the works of God, and have arrived only to a confused mass of imaginations very similar to the old proverb "As the fool thinks so the bell chinks ;" and I say, as the geologist thinks, so he prints ; never was folly carried to so great a length. I shall endeavour in my explanations hereafter expressed to show that geology is contradictory when compared with the Scriptures, and is calculated to sow the seeds of infidelity, and I sincerely hope that after a believer in that useless science has read this

small work he will rejoice that he has time and opportunity left him to recant, as nothing will ever give me more satisfaction than having the belief that I have been instrumental in saving some poor lost brother from the contaminating influences of that injurious and unholy science, Geology.

My first step in showing the fallacy of the extreme believer in geology will be in producing Scripture proofs against the opinions of eminent geologists respecting the origin of coal.

It is universally believed by every geologist that coal is nothing more or less than decomposed vegetable matter produced from the luxuriant growth of ferns, trees, and other plants. I also find that they are of opinion and firmly believe that at a very distant period the present bed of coal was then a beautiful surface—the green covering of the earth—producing vegetation so rank and so rapid that in course of time the surface of the earth was then coated with decomposed vegetation to a depth corresponding with the measures of coal as they are now being worked in different parts of the world, varying from three feet to thirty-three feet thick ; they also fancy that England was then so much exposed to the influence of the sun, it being then a tropical climate, vegetation grew so rank and rapid, that crops were continually growing up and decaying in such abundance that the surface of the earth in England and other parts of the earth where coal exists was coated with this rich coal-

producing material—vegetable matter—to the depth sufficient to correspond with the measures of coal as found in different coalfields. They also say that it was then coated or sealed up by incrustation and deposits of earthy matter, in layers, to the surface as we now walk and move on at the present day.

Also they believe that the time when this vegetation ended was a very remote period. Some geologists venture to say that it must have been some billions of years ago, others make it far distant by stating untold ages ; but all geologists agree that it must have been millions of years since the first layer of deposit commenced fixing itself over this valuable material of nature's production, to be hermetically sealed up for the use of man till the great day of revelation should arrive, which has taken place some hundreds of years since, on the day when the first discovery of the coal was made. I shall now endeavour to show that the geologists' opinion of the formation of coal is against common sense, and also contrary to the holy Scriptures.

I shall now refer to the holy Bible and common sense to prove that the before-stated opinion of the geologist, upon the origin and formation of the coal field, is in opposition to both.

In referring to *Genesis* i. c., 1 v., it says,—“In the beginning God created the heaven and the earth.” Now as the Almighty here omitted to state through his servant Moses which day he made the heaven and

the earth, but did after state which day he made the dry land, and you will find by reading the 9th verse that it distinctly tells you that on the third day he said, "And let the dry land appear, and it was so." In the 2nd verse it says, "And the earth was without form and void, and darkness was upon the face of the deep, and the Spirit of God moved upon the face of the waters." This verse clearly shows that although the Almighty had created the earth previous to the first day of time which dates from the commencement of the habitable world or earth intended for the use of man, and it also distinctly states that previous to the first day the earth was covered with water, and also that darkness prevailed; now as the surface of this globe was covered with water, and, above all, that darkness prevailed, it is very evident to the laws of nature and common sense, that no kind of vegetation was going on till after the fourth day of the Creation, *Genesis* i. c., 16 v., which says, "The greater light to rule the day." As this was the first day the sun ever shone upon this earth we now live on, how could it have been millions of years ago since the vegetation was going on so rapid and rank to form the decomposed material now representing the coal, as said by geologists? This is the first error they make, because it has not been more than six thousand years since the first day that light appeared, and this earth without light and sun must have been all darkness and desolation, not possible for anything to live

on, either plants, animals, or fishes, because light and heat are the main source of life, and in the absence of it nothing could exist.

It is very evident, from what I have before stated, that trees, ferns, and plants were not growing six thousand years ago on any part of this globe, because there was no surface of earthy matter for them to root in. On the third day of the week He made dry land appear, and on the same day created every tree, plant, and vegetable, as in *Genesis* i. c., 11 and 12 v., viz., "And God said let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself upon the earth, and it was so." How can it be possible to dispute such information as this, it being the very words of God Himself, who never errs or misrepresents anything. Which is it better to believe, the word of God Himself, or the fallible and imaginary opinion of man? The geologist again says, "that after the process of vegetation had ceased the decomposed vegetable matter was then coated by layers of sedimentary deposits of earthy matter precipitated through water, sufficient to represent the coating of the coal seam as it is now found in all parts of the world. I should like to know how successive crops of trees, ferns, and plants could grow without being choked with the last crop; one would think that after one crop was ripe and fell to the earth, decayed off at the roots, that it is fair to infer that no other crop could grow till some hundreds

of years had passed away for decomposition to take place; then, after all the surface was shook down and rotted away, where could the seeds and young plants come from to start the next crop?

What a fearful mistake they make, because if this seam of vegetable matter had to be coated with earthy matter by waters running over it and leaving a continual deposit till the required coating was accomplished, the decomposed vegetable matter, being in a soft state and unsolidified, would have been easily removed by the surging of the waters, and could not be found so level and smooth on the top of the seam of coal as it now mostly proves to be. Again, how was it possible that water could have run upwards to leave a deposit on the hills and highlands so far above the level of the sea? Then again, when we come to calculate the immensity of this earthy deposit—for instance, let us imagine the quantity of deposit on one acre of coal alone, supposing it to be three hundred yards deep, and in many instances it is found to be much deeper, it would then take one million four hundred and fifty-two thousand tons of earthy matter to coat it; and, if we only come to think and exercise common sense, where could it be supposed the whole of the deposits of earthy matter came from to cover the whole of the coal seams in different parts of the world, if it had deposited itself over the coal by natural causes? Even allowing it possible to have come there, it must have come from somewhere,

leaving an immense space or cavity nearly corresponding with the space occupied by the waters of the sea! It is a great mistake to suppose anything at all about where it could come from by natural causes, when we have such reliable proofs in Scripture of where it came from. If you will refer to *Acts* xiv. c., 15th v., you will there see what is the opinion of the Apostle how the earth was made, viz., "Ye should turn from these vanities unto the living God which made heaven and earth, and the sea, and all things that are therein." Now this proof is little more than one thousand eight hundred years ago since the Apostle uttered these blessed truths, and who doubts (even the geologist) but that this earth was then coated with as much earthy matter as it is now found to be in this present day? If so, he clearly proves that the earth he then stood on was not produced by natural causes, nor even the contents of the earth (the coal being one of them); but that without doubt the Great God Almighty and All-sufficient, made the earth, the seas, and all that therein is. Also, we have more such proof in the holy Scriptures, they are full of facts to prove that the earth and its contents were not produced by natural causes. Hear what St. John says, *John* i. c., 1st to 3rd v., "All things were made by Him, and without Him was not anything made." Let us also refer to *Exodus*, xix. c., read the chapter all through, and you will find that in the third month the children of Israel came

out of the land of Egypt, and came into the wilderness of Sinai and camped before the Mount, and Moses went up unto God and the Lord called unto him out of the mountain, saying, "Tell the children of Israel if ye will obey my voice ye shall be a treasure unto me, for all the earth is mine." *Exodus* xx. c., 1st and 2nd v., "And God spake all these words saying, I am the Lord thy God and thou shalt have no other God." This tells you plainly that it is God Almighty Himself that is speaking; see what He says in *Exodus* xx c., 11th v., "For in six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day, wherefore the Lord blessed the sabbath day, and hallowed it." If the Lord made the earth and the sea and all that in them is, in six days, and those six days were the first six days of the week of time, and, as I before stated, time only began about six thousand years ago, how can the account given by geologists agree with the Scripture? It certainly does not. And again, in *Exodus* xxxi. c., 17th v. it says, "For in six days the Lord made heaven and earth, and on the seventh day he rested." I have been told by geologists that the works or writings of Moses are not true; hear what St. John says respecting the truth of the writings of Moses, *John* v. c., 46th and 47th v., "For had ye believed Moses, ye would have believed me, for he wrote of me, but if ye believe not his writings how shall ye believe my words?" Also refer to *Luke*

v. c., 14th v., there you will find our Saviour Jesus Christ acknowledging Moses and quoting his commandments, for example, viz., "And offer for thy cleansing according as Moses commanded." Again, in *Luke* xxiv. c., 44th v., you have our Saviour's acknowledgment that Moses spake truthfully, viz., "And he said unto them, these are the words which I spake unto you, that all things must be fulfilled which were written in the Law of Moses and in the Prophets." After such divine acknowledgment and proof respecting the truth of the writings of Moses have been stated, no true christian and faithful believer in Jesus Christ would ever doubt but that all the writings of Moses as written in Scripture are faithfully and truthfully recorded. Such being the case, how can Scripture and Geology agree? I might quote a dozen more Scripture proofs, showing the fallacy of geologists in their opinion of the origin of coal; but I shall now show you how the geologist is deceived, and also show you my opinion as to the origin of coal.

The greatest deception that the geologist meets with is the likeness of ferns, leaves, and stumps of trees, found in the seams of coal of different parts of the world; as the geologist is a man of science, he considers it degrading (when these likenesses are produced and exhibited by the explorer of coal to be examined by scientific professors) to pass them by without offering some opinion as to how or where it

was likely to proceed from ; the opinion once ventured out (as it has been), it would be destructive to the prosperity of the science, if geologists themselves were ever to waver, or confound each other, by venturing two or more opinions. I have seen these fossil delusions, and certainly am surprised that gentlemen of such high reputation for sound intellect in other matters of opinion should give themselves up to be led astray, simply because one of their ancient brother geologists should have made so foolish a suggestion as to his opinion how these likenesses were introduced into the coal seam. When these likenesses of trees, branches, ferns, and leaves are broken, they prove to be as pure and as much like the ordinary coal as possible ; in fact, they are nothing more than coal, even the opinion of the geologist bears it out ; but all they cling to is the appearance of this different-shaped lump of coal. They fancy how could nature have shaped it to correspond so near in form with trunks of trees, and leaves, &c., to be found now growing on the present surface of the earth's crust ? This is their problem, very easily solved. If, instead of searching after things past man's understanding, they would devote the same time and labour, and perseverance, in examining the holy Scriptures, they would then be of the same opinion as found in *Ecclesiastes* viii. c., 17th v., viz., "Then I beheld all the work of God, that a man cannot find out the work that is done under the sun, because though a man

labour to seek it out, yet he shall not find it; yea farther; though a wise man think to know it, yet shall he not be able to find it." Hear also the opinion of *Job xxxvii. c.*, 5th and 23rd v., "Touching the Almighty we cannot find him out." Again, see what *Ecclesiastes iii. c.*, 11th v. says, viz., "He hath made every thing beautiful in his time, also He hath set the world in their heart, so that no man can find out the work that God maketh from the beginning to the end." After seeing such astounding proofs in Scripture, to a certainty that no man (that includes the geologist) can find out how he made this earth, or how he placed these fascinating imitations of reality in the bowels of the earth, one would think it vain to waste further and useless labours on so sacred a problem.

After showing the opinion of others respecting the origin of coal, I shall now venture my opinion as to its origin, which is built on such a rock that no man can shake—the holy Scriptures.

I have read the holy Bible from *Genesis* to *Revelation*, and can find nothing to lead me to believe or suppose that this beautiful earth we now live on could be produced from natural causes, or that it ever produced itself by the lapse of time, amounting to an incalculable number of years; but I can find in almost every chapter something to make me believe and to give me every assurance that all christians are certain which way it was produced, and nothing can shake

my faith till the Scriptures are confounded. My explanation of how this earth was formed is very brief, because it cannot be enlarged upon, there being only one way. I verily and truly believe that in no other way was this earth produced than by the almighty and omnipotent power of the Divine Creator, the God of all things visible and invisible; also I believe that God made this beautiful earth in one day, as stated in *Genesis* i. c., 9 v., where it says (the Almighty spoke these blessed words), "Let dry land appear, and it was so." He not only made the dry land appear in one day, but also made the whole contents of the bowels of the earth in the same moment of time. Who dare venture to say that He was not able to do so? And where can you find it in the holy Scriptures that the earth and its contents were produced from natural causes? The geologist will say, How do you account for the likeness of stumps of trees, ferns, leaves, &c., being found in the middle of the solid seam of coal? Because the Almighty knew on the day he made the seams of coal and all the other strata of the earth that in three days after he intended to make something far more wonderful than the strata of the earth—Man; and, in making him, bestowed upon him a most liberal amount of knowledge, and He foresaw that very day, at one glance, what would be the future requirements of man, and therewith provided at one word all the seams of coal, &c.; and He was also so loving and kind that

He placed abundance of it for our use as long as man was likely to require the use of it; and He also knew that man would be created out of earth, and that He should make him in the image of Himself, and blow the breath of life into him. Consequently, he would be a noble animal, superior to all things before created or made; and in making the seam of coal He only placed these likenesses of trees, &c., to show to man the wonders of His power, and to baffle the aspiring imaginations that He knew would be exercised in the vain hope of finding out the works of Creation.

In my estimation, the geologist commits as great a sin in attempting to offer even an opinion of the origin of coal as the descendants of Noah did in attempting to make a road into Heaven by building the Tower of Babel in the plains of the land of Shinar, *Genesis* xi. c. These aspiring people were only trying to find out the works of God, and the geologist is attempting at the same, and has arrived very nearly at the same result.

Why should the geologist ponder and puzzle himself, and others also, in attempting such hopeless explanations, when the Scripture tells us so plainly, in so many instances, that no man will ever comprehend or find out the works of God? Refer to *Ecclesiastes* xi. c., 5. v.; also *Ecclesiastes* x, c., 14 v.; also *Job* ix. c., 10 v.; also *Ecclesiastes* iii. c., 11 v.; also *Ecclesiastes* viii. c., 17 v.; also *Job* xxxvii. c., 23 v. Having now shown that the geologists' opinion of the

origin of coal is contradictory when compared with the holy Bible, I shall here finish my remarks upon that subject, and I sincerely hope that any professor of geology who should read my humble opinion of the science, will not feel offended at the remarks I have made, as I did not intend them as an insult to either the science or any individual.

I shall give you another instance of the evils of geology, as appeared in a London paper, 20th July, 1867, viz.:—

“AGE OF NIAGARA.—Many eminent geologists affirm that the eroding power of the swift rolling waters of Columbia, Potomac, and Missouri could not, on an average, effect the stupendous erosions alluded to in less than forty thousand years, and Sir Charles Lyell asserts, after personal study, and close searching, and accurate observation of the nature and properties of the Silurian Rocks of the Niagara bed, and of the annual average rate of the erosion at present, that the strength of the eroding power, great though it be, could not possibly have effected the retreat of the cataract to its modern site in less than thirty-five thousand years.”—*The Twin Records of Creation*.

It is plainly seen that misconceptions are going on in the nineteenth century, as this opinion by these eminent and scientific gentlemen is calculated, when read by men of poor frail understanding, to shake their confidence in the truth of the records of creation.

Read *Genesis* i. c., 9th v., viz., "And God said let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so." The reader begins to wonder how these beautiful falls could have been running, just as they do now, thirty-five thousand years ago, when it plainly shows us in *Genesis* that the dry land had not made its appearance six thousand years ago. These two opposite statements confound each other so wonderfully that the Scripture proverb comes in place again, *Matthew* vi. c., 24th v., "No man can serve two masters, for either he will hate the one and love the other, or else he will hold to the one and despise the other, ye cannot serve God and Mammon." Neither can any man read the above two statements and believe them both, he must either hold to the one or despise the other. The dangers of these imaginary calculations are, when read by the ignorant, or men of frail understanding, calculated to cause them to first waver, and at last to rather believe the testimony and opinion of man than the unerring words of God himself. In many instances have I come in contact with men who hold to the science of Geology simply to give them a license for their conduct, because geology, they say, gives them every assurance that the Scriptures are false; consequently, if so, they can carry on their career of recklessness and folly without any dread of the awful punishments set forth in the holy Scriptures. Having now shown that Scripture

will not agree with this erroneous calculation of the age of Niagara, we shall see how it agrees with common sense. Now what is more wondrous and sublime than the works of creation altogether? Why nothing that man ever produces is equal to the smallest thing of creation, because every new thing invented or made by man is capable of alteration for the best, but not so with the works of God, because as He makes it at first so it remains perfect, requiring no secondary improvement. These stupendous and magnificent Falls of Niagara were started to run on the third day of the first week of time, when the Almighty had ordered or commanded the waters to be gathered together unto one place, which He called sea; these channels or cavities being placed with the fall for water and forming part of the intention of the Creator's will. Immediately after the waters were gathered together and the earth made its appearance they then began their work of running and flowing over the precipice then made, to assist in showing to favoured man the grandeur and the power of God. It seems plain to me that the geologist makes his calculation of the age of Niagara by the erosion, or the time it must have taken in eating away the cataract, to cause the retreat as found at the present day. If we will only consider the great power and mysteries of creation, it is easily explained how the small proportion of (what the geologist calls Silurian) rock might be eaten away so as to lead the geologist

astray in forming his calculation, because from observation of the erosion taking place in one year, or any given number of years of observation, their calculation, if the rate of erosion or eating away was carried on at one uniform rate, would leave no doubt then but that they are quite correct in their calculation of thirty-five thousand years; but where have they any other record or information than their lucid imagination? Why not give God, the Great Creator, credit for being able to form the rocks of such hard material, where it is now being eaten away, and also being able to have made the rock of such a soft nature at the beginning, to show it not only possible but certain that the retreat of the cataract could be easily accomplished in the six thousand years, it being the age of the Niagara as given us by Scripture proof? These are the great blunders in the science, they fancy everything connected with the external film or crust of the earth must have had a gradual and steady rate of production, they never deviate from calculation by average and time. If they would only consider, they would find that God can do as much work in one day, if it should be His will, as they would suppose had taken one million of years: this I call the wonders of creation, everything is so wonderfully made, that in spite of all our science and high learning, we find it not only difficult but impossible to make any reliable calculation of the works of creation, as nothing else can be relied upon but those

blessed truths given us in Scripture spoken by the mouth of God.

Having before shown the elastic imaginations of scientific gentlemen respecting distant works of creation, I shall now introduce a geologist's opinion of creation which happened within four miles of my residence. I also saw and recollect the party described in the paragraph hereafter mentioned, termed by the geological science a field meeting, and as the paragraph shows, it was honoured by gentlemen of high standing, and also a large party of divines; also after the party had finished their explorations they assembled at the Shenstone Hotel, Hales Owen, and there partook of a sumptuous dinner, which, in my opinion, was the most sensible and profitable part of their labours for that day. I will now reiterate the paragraph that appeared in the *Daily Post* newspaper, dated Thursday, September 15th, 1864, it being only two days after the field meeting had taken place, viz. :—

“DUDLEY AND MIDLAND GEOLOGICAL SOCIETY.—A field meeting in connection with the above society was held on Tuesday last, in the neighbourhood of Hagley and Hales Owen. The weather was rather unfavourable for out-door explorations, but notwithstanding this, there was a good muster of members on the occasion, amongst whom we noticed Vice-President Professor Beckett and party; Revds.

J. H. Thompson, D. Robertson, J. W. Bain; Dr. Fraser; Messrs. W. Fleming and party, W. Jenks, J. Rabone, S. Allport, E. Hollier, Henry Johnson, S. Dickenson, George Perry, C. D. Lessert, H. F. Rose, &c., &c. The first point of interest was Hagley Church, now being completed by the addition of a tower and spire. The building contains a few remains which indicate the antiquity of the edifice which originally occupied the site of the present church; a stone coffin in the northern wall is particularly noticeable for the embellished cross with which it is surmounted. The monuments mostly relate to the several members of the Lyttelton family, and are exceedingly plain and simple in character. Several beautiful memorial windows adorn the church, and the chancel is highly ornamented with encaustic pavements and carved work. The reading desk is of Caen stone, with pillars and panels of Devonshire polished marble. Having examined the principal points of interest connected with the church, the party proceeded through the park, which is situated on the upper measures of the new red sandstone rocks, but owing to the faint exposure of the rock formations, the main interest attached to the artistic features by which the natural beauties of the scenery have been so remarkably enhanced, particularly by the Poet Lord, who called in all the embellishments which the landscape gardener could devise; the chain of tiny lakes, with the lengthened vista terminated by a classic temple, was greatly

admired, while at every turn peculiar beauties presented themselves. After leaving the park, the geological features of the Clent Hills engaged the attention of the party. A quarry in the hill side, immediately beyond the modern Druidic temple, afforded some good specimens of the igneous rocks which cap the hills. This extensive collection of partially rounded fragments, set in a matrix of permian *débris*, is a deposit of great interest to the geologist. The exact nature and composition of this formation was long a vexed question with scientific men, but Professor Ramsay appears to have elucidated the history of this heterogeneous collection of igneous and other rocks. He has succeeded in establishing a connection between the permian breccia of the Clent and Lickey Hills, and the lower silurian formation of Shropshire with their igneous rocks of varied character. He supposes, and with good reason, that in the glacial period, almost the last age before the introduction of the human race, vast glaciers accumulated in the valleys of the Longmynd Hills, and produced icebergs, which were carried by the prevailing currents in an easterly direction, until they were stranded upon the sunken masses of permian rocks forming the basis of what are now the Clent Hills, and as they melted they naturally deposited their burden of igneous and other rocks on the summit and flanks of the subaqueous elevations. Though a vigorous search was made, the party were not successful in finding any fragments

having scratched surfaces indicating the grinding action of the glaciers; but a very extensive series of trap rocks was obtained. The next point of interest was the strangely isolated little church standing on the north east flank of the hills, and well known in the whole district from its supposed connection with the legendary history of St. Kenelm, one of the princes of Mercia, in Saxon times. Tradition asserts that this young prince was murdered by order of his crafty sister, who wished to rule the kingdom herself; but the foul deed is said to have been miraculously revealed by a dove, and the piety of the people led them to erect a church over the spot where he was found. The present building is a modern structure, but it contains a few remnants showing its ancient foundation. A beautiful Norman archway, richly and fantastically carved, spans the entrance door; on the western wall is also an antique gem—a figure of the patron saint in the act of delivering a blessing. This remote place is connected with many old charities and curious customs, and until recently an annual fair was held near the church. One of the customs appears to have been exceedingly quaint. On a certain Sunday, called Crab Sunday, the parishioners amused themselves with pelting the clergyman as he passed from the adjoining farm house to perform his duties. This peculiar usage appears to have originated in the lax morality of some incumbent, who is reported to have so far forgotten his sacred calling as to make

an illegal appropriation of certain apple dumplings, when his irate parishioners took the law in their own hands, and inflicted the pelting chastisement upon the offender. The custom was abolished under the late incumbent. A walk of about two miles brought the party to Hales Owen. The church formed the principal object of interest, and here the Rev. D. Robertson read a paper entitled 'Archæological Notes of Hales Owen Church.' After alluding to the general character of the building, the following details were given:—The original Norman church appears to have been erected early in the reign of Henry I. The edifice had the south aisle repaired about 1120, and the whole church was completely remodelled as late as 1440. The chancel walls are Norman, as are also the piers and the chancel arch. The east window is restored with tracery of later date. The nave is much more modern than the chancel, and the clerestory windows are good perpendicular, consisting of two lights each, with three-foiled heads. The south doorway is Norman, with the outer surface ornamented with jamb shafts and reserved mouldings. The porch is also Norman. The font is very early Norman, possibly older than any part of the church, and may be dated about A.D. 1110. The west division of the church, now separated, was originally open with the other parts. The nave retains its original Norman character; on each side are two plain semicircular arches. The east wall is Norman, and has two string-

courses and panelling of interesting arches and shafts. The south-east chancel buttress is decorated. The tower is divided by two strong courses, has an embattled parapet, and a good hexagonal spire. In the churchyard is a mutilated effigy of a priest; at the west end of the tomb are two panels, one containing the remains of a representation of the Trinity, and the second of the Crucifixion—date about 1350. Having examined the various points mentioned in the paper, the party proceeded to the Leasows, and spent some time in noticing the picturesque grounds which the genius of Shenstone has rendered a classic spot, and it need hardly be stated that much of the poet's work has been entirely obliterated by time; but sufficient yet remains to show the peculiar bent of his genius, the strange combination of scenery, and the occasional glimpses afforded of the pleasantest views towards the west yet remain much as the enthusiastic genius left his grounds; but there is not nearly that finished aspect about the place which once distinguished it. At half-past three dinner was provided at the Shenstone's Arms, and afterwards a vote of thanks was given to the Rev. D. Robertson for his valuable paper. Lord Lyttelton and Mr. W. Matthews afforded every facility to the party for visiting Hagley and the Leasows respectively. The day's proceedings terminated about six o'clock, having throughout been of a very pleasant and interesting character."

Having finished relating the paragraph just as it appeared in the *Daily Post*, I shall now proceed to make a few remarks respecting the opinion of this wonderful science, as stated in the paragraph, by solving the long vexed question of how and where that great body of earth and heterogeneous rocks came from, known by name as (the now fashionable place of resort) the Clent Hills. It really appears a mystery to me how men of such learning and high standing can throw out such wild imaginary ideas; because every person, both learned and unlearned—even parties who profess to be firm geologists, that I have had any conversation with just after the paragraph appeared in the *Post*—they all to a man disagree with the opinions set forth in the newspaper. It says it was a long vexed question, and that part I endorse entirely. Now, as far as my humble opinion goes, it remains a more vexed question now than heretofore, because till this opinion appeared in the newspapers, I, for one, never vexed myself about the formation of our beautiful and noble Clent Hills; but ever since reading that imaginary statement, I feel convinced that the question has become more vexing than ever. It appears so strange that for centuries the profession has never ventured an opinion upon that mysterious formation: in that, they were verywise in doing so, and I can see no reason why an opinion should have been formed now, without it is for a similar reason, to show which I will relate an anecdote.

Some time ago a curious piece of mechanism was either worn out or had become of no use to the owner, consequently it was sold to a marine store dealer, and along with other articles of old iron it was taken to the forge not far from where I live, the whole of the scraps were weighed, and the workpeople of the forge came round the heap of old iron that had just been purchased, and immediately commenced scrutinising its contents. This curious piece of old iron, in the shape of a worn-out machine of some sort, soon formed a topic for discussion. One said it was or had been one thing, and another supposed it to have once been another thing, in fact every man seemed to arrive at a different conclusion. They had all given in their opinions (respecting what the use of it had been) excepting one boy, so to hear what his opinion might be they asked him what he thought it had been; he looked it over and gave for his answer, that he did not know; but the lad bethought himself about his grandfather who was very much skilled in art and science, and he directly informed them that although he could not tell what it had been, he said if his grandfather was there he would be sure to know. They all being fired with curiosity, and all disagreeing in their different opinions as to what it was or had been, persuaded the lad to fetch his grandfather; he readily obeyed the command and started off in search of his grandfather, thinking this was a rich opportunity for his family to show up the supposed heredi-

tary talent—he found him immediately, and when the boy told him that he was wanted to arbitrate and pass his superior judgment on a matter of great dispute and contention he readily obeyed the call and proceeded with the lad to the forge to solve the hidden mystery. As soon as he made his appearance at the works he was greeted as a man who was expected to reveal some news of importance. They presented the puzzling piece of iron to the old man and told him the whole matter of fact concerning it, and then silently awaited his answer. The old gentleman turned and twisted it about, evidently somewhat puzzled to find a proper name as answer to the question. Every eye was upon him, expecting he would coincide with their opinion. At last he spoke, after being silent for a considerable time, and said: “It’s something:” and upon that he walked out of the forge. As soon as he was gone the lad was delighted, and cried out in a loud voice, “Did’nt I tell you my grandfather would know what it was?” They said to the lad, “Your grandfather has not found out what it was;” but he continued to assert that he had found it out. They then said to the lad, “If he found out what it was, tell us what the name of it is.” The lad, thinking that he should show up the talent of his family, directly said, “Did’nt you hear the name? Why he said it was a ‘Something!’” The lad evidently thought that this was intended as the proper name for the article in contention; showing that

when once an assertion has been made, and that assertion comes in contact with the ignorant, it is immediately taken for fact, till some wiser and deeper thinking man throws a proper light on the subject. Now this anecdote applies to the opinion given us of the formation, as before described, of our celebrated Clent Hills, because a professor in the science of geology has ventured an opinion as to what, how, and where the Clent Hills came from. It certainly appears to me to be nothing but a wonderful display of startling imaginations, and there are men to be found, like the boy was by his grandfather, viz., ready and willing to believe it, simply because the opinion emanated from their superior brother in the sciences. They are, like the lad, blind to all things except their faith in the superior judgment of great men. Now this opinion is once ventured upon, the formation of Clent Hills will be handed down in record to our posterity as the opinion of geology; simply because the opinion emanated from a professor in that science.

I shall now attempt to show the absurd notions of the opinion given us in the before-named paragraph, respecting the composition and formation of the Clent Hills. The first part of the observation given as the professor's opinion says, "that a quarry forming the base of the hills showed to them specimens of the igneous rocks, such as are found on the top of the hills." This is evidently acknowledging that igneous

rocks form both the base and the top of the hills. Now igneous means fiery, containing fire, emitting fire, &c. If these igneous rocks had been conveyed to Clent by the supposed iceberg, how is it that they are not found intermixed in all parts of the hill? because it seems more incredible than the other part of the story, to think that an iceberg could have been so systematically charged with *débris*; and the igneous rocks all being charged in the icebergs in proper rotation, layer upon layer, till the top of the iceberg was loaded with all igneous rock, so that when the process of melting should begin it should be deposited uppermost, so as to form the cap of the hill with igneous or fiery rock. This is rather a fiery supposition, to begin with; next, he supposes that these icebergs swam to Clent with their valuable cargo of geologists' puzzles, sometime in the glacial period, almost the last age before the introduction of the human race. Here the grand errors make their appearance again, because they will have it that formations, living objects, and vegetation, all went on in its proper course for ages, and an innumerable number of years before the introduction of man; these are the parts I so utterly disagree with, because they contradict the holy Scriptures. Again, it says, "Vast glaciers were accumulated in the valleys of the Longmynd Hills, and produced icebergs, which were carried by the prevailing currents in an easterly direction, until they were stranded upon the sunken

masses of permian rocks forming the basis of what are now the Clent Hills, and as they melted they naturally deposited their burden of igneous and other rocks on the summit and flanks of the subaqueous elevations."

How is it possible that, after the glaciers were accumulated in the vallies of Longmynd, that accommodating nature first of all kept the vallies of Longmynd free from currents of water to allow sufficient opportunity for the accumulation of these monster glaciers, and then at the proper time, when they were charged well, and loaded with their cargo of future Clent Hills, currents of water should come just at the proper time to ship them off to their intended place of destination, and to settle down exactly over a prepared foundation of sunken permian rocks?

This, to me, seems to be a very confused idea of the formation of these wonderful hills. Even the foundation must have been above water at one time, or else how could it be said they were stranded upon the sunken permian rocks? Now the greatest proof of all that the account given us of the nature and composition of the Clent Hills is against common sense is, that no valley could have been sufficiently deep to have received glaciers alternately charged with *débris*; because the glaciers must have been five or six hundred yards high to have contained *débris* or rock sufficient to have formed Clent Hills, and as there would be ten times more bulk of ice

than rock to give the rock buoyancy, when required to float, by the waters coming that way to call for it. And the greatest of all mistakes against common sense is that, supposing an iceberg to be on the move, thoroughly charged with a sufficient quantity of *débris* and igneous rocks, making its way in an easterly direction to settle on the sunken rocks prepared for its base, what must be the depth of water to carry a vessel loaded with a cargo of such magnitude? I will now just make a summary calculation. Suppose Clent Hill to contain seven million five hundred thousand tons of *débris*, which it would by taking the base of the hill to be five hundred yards square and the height at sixty yards, and multiply the square at the base by the half of the height, it would produce the above number of square yards, and each yard contains about one ton of earthy matter. As this is a monster cargo, it is fair to infer that it would require a good sized ship (in the shape of an iceberg) to carry it away. As a matter of course it would certainly require five times as much weight of ice to buoy it up. If so, the whole weight of the cargo and ship would be thirty-seven million five hundred thousand tons. Now as there was but just depth of water sufficient for it to float in, and it became stranded before melting, I maintain that although it might be stationary until the ice began to melt, as soon as one million tons of ice were melted, which would be only one thirty-seventh part of the whole weight, it would

lighten the ship so much that it would immediately float away before any quantity of the *débris* could be deposited. Again, if it had been possible for Clent Hill to have floated into its position as it now is, where could the adjoining Warton Hill have come from ?

Professor Ramsey could not fancy it floated there in an iceberg, because it would be an impossibility, as Warton Hill and Clent Hill are so close to each other that they touch at the base of the hills ; and if Clent Hill was brought there in an iceberg, Warton Hill, which is quite as large, could not have been floated to its position, because it is so near to Clent Hill that an iceberg loaded with *débris* sufficient to form Warton Hill could not have come sufficiently near to Clent Hill to have deposited its *débris* to form Warton Hill.

A proof that some of the party forming the field meeting endorsed this imaginary opinion of Professor Ramsey on the nature and composition of the formation of Clent Hills, must be very evident from this part of the paragraph as stated in the newspaper, viz., " Though a vigorous search was made, the party were not successful in finding any fragments having scratched surfaces, indicating the grinding action of glaciers." Now from this statement Professor Ramsey's opinion was evidently believed, because otherwise they would not have searched so diligently and perseveringly in trying to find even a slight proof to bear them out. If they had happened to find a

pebble stone, which might have been thrown into that quarry by some chance or other, and previous to its being thrown there had perchance been ground by a cart wheel or any other cause, then it, would have repaid them for their industrious and deserving search; if that good fortune could have happened, there is no doubt but the pebble would have been conveyed to a safe resting place, and put on record as a guarantee and proof that there was some foundation for the report of Professor Ramsey's opinion of the nature and composition of the formation of the now celebrated Clent Hills.

If this is the opinion of the formation of the Clent Hills in the nineteenth century, when all the sciences are supposed to have ripened up to something like perfection, what must we have expected had any professor of geology ever offered or ventured an opinion of the formation of Clent Hill five hundred years ago? Why, he would have offered as an opinion, to correspond with those ancient times, that Clent Hill must have been produced by a continuous waterspout emptying itself just in that spot for a number of years, and the suckers of the waterspout would be so made up of vacuum that they would have had power to draw up rocks and pebbles from the bottom of the sea, and deposit them in that one particular place, so as to form the now known Clent Hills. This and other corresponding absurdities would no doubt have appeared and astonished the natives in those

days, who would then very possibly have taken them for fact, and pushed geology along as the predominating science to be relied upon for solving the wondrous works of Creation.

I shall now show by Scripture proof that the opinion of this geologist is contradictory to the holy Bible, viz. :—"The Almighty God came down in a fiery pillar or cloud on to Mount Sinai, and there spoke to Moses those precious truths concerning all creation." Refer to *Exodus* xx. c., 11 v., and you will find that God himself said, "For in six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day, wherefore the Lord blessed the Sabbath day and hallowed it." Now if the Lord made the earth and all that therein is in six days, how could the Clent Hills have been floated there in an iceberg ages before the human race made its appearance on the earth, as said in the newspaper? The Almighty distinctly says that all was made, even including the hill that he stood on, in six clear days, and it is not yet six thousand years since He made the earth. How can we believe that such imaginary thoughts as those related by Professor Ramsey can agree with Scripture? I shall now conclude my remarks on the paragraph as it appeared in the *Daily Post* as before stated; and I sincerely hope I have thrown some light on the absurd notions of geology.

I shall now describe a few facts that from my experience in the errors of geology are worth naming.

In my travels and experience through life I have come in contact with believers in geology, who have attained such odd and curious notions through studying the science, that they have astonished me on hearing their description of what the science has taught them. Now every science has its evils and its good; some more and some less; but all other sciences can be traced to have had something good proceeding from their usefulness and instructive character, and also some tokens of benefit to the world; but geology does not rank in that blessed and useful denomination, if judged according to the proofs I have had by coming in contact with geologists.

I happened to meet some years ago with a well-educated gentleman, a man of superior learning; in fact, he had been educated for a professional man of the law, and we commenced arguing upon different topics, till at last we introduced the science of geology. I soon found that he was a firm believer in the science and fond of talking about it, and I conversed with him until he suggested one of the wildest imaginary opinions I ever heard of respecting his belief in the formation of the earth, and other matters connected with it; and I also found out that his belief was firmly established, through the science of geology, because it had given him every reason to believe so.

His first opinion of the origin of the earth was stronger than any geologist ever before ventured upon, because he was of opinion that this earth commenced

being formed from natural causes. He fancied that as the world, or globe of earth and seas, hangs upon nothing, and simply spins round in space, therefore the first formation commenced from a mere speck, which would then appear no larger than an orange suspended in the air, and that gradually and steadily the formation proceeded by regular deposits around the small centre, till adding to it for endless numbers of years by a continuous deposit, it increased itself, by nature's own assistance, to the size as now seen in the present day. He also believes when the earth had formed itself to the size corresponding to depths where coal is found, as known to explorers in minerals, that the temperature of the earth changed every now and then, between intervals of some billions of years, and sometimes it was exposed to the influence of different kinds of heat, and in that way he accounts as the reason of the lower strata of the earth varying so much, they being deposited at different seasons and times of extreme ranges of temperature. He also said that at the time every different layer or strata was deposited, that different kinds of animals, birds, and fishes existed for a long period, till suddenly another temperature set in which caused the whole of the living things to die, because the nature of the climate being so suddenly changed, and they being made suitable to exist in one temperature, could not withstand the immense alteration; then all things that had before appeared on the surface were smitten

down, and time rolled on till a certain layer of deposit had covered them up, and they are now being found fossilised, and that is the way he explains how different animals, and birds, and fish are found in a fossil state in different rocks, coal seams, and strata of the earth. He also fancies that at some of the periods the earth was a molten mass of fire, and that is how he accounts for those rocks that are found of an igneous origin in different parts of the earth's crust.

As to the time that the coal seam was formed, he distinctly told me that England was then a tropical climate, producing vegetation so rapid that it soon furnished the earth's surface with a layer of decomposed vegetation sufficient to become the future or the now present coalfield. He went on describing the earth's formation so systematically that it seemed no difficulty in his view of how and where it came from. He then said that the earth being perfected as to size and constituent parts, it remained as we find it for an innumerable number of years before the human race made their appearance to the perfection they are now enjoying. Now his ideas as to the origin of the human race are as odd as his notions of the formation of the earth. He says that our great-great-grandfather was nothing more or less than a sea-weed. He told me that he had his information on that subject from a work that is in print entitled *Doctor Darwin's Origin of Species*. He actually told

me that he believed the contents of the Doctor's work, and that we gradually improved from a seaweed to an insect, and so on, till we in time became one of the lower order of reptiles and animals, and from that stage we were next introduced as monkeys, then gorillas, and lastly savages, in the now human shape, requiring only cultivation to produce the human race as now found in this nineteenth century. He also believes that man has not yet arrived at anything like the highest state of perfection to which he will ultimately attain; and he believes that when man has attained this climax of perfection he will then commence to degenerate, and gradually sink down, stage by stage, just in the same order that he rose to perfection, till ultimately he will become extinct, then he says some other great change will come across this earth to cause some other race of animals to make their appearance. These notions, and other absurd ideas, I find spring from the high opinion he holds of the science of geology, because he is so high learned and skilled in sciences that he holds them up as bearing him out in these extremes and wild imaginary notions of creation. If geology is calculated to lead a man on to imagine such incredible ideas, and I can see clearly that a man with an elastic mind for imagination can be so beguiled into the belief of some such notions as disagree with Scripture, and when we find our great men of science telling us that the earth was producing

vegetation some millions of years before the introduction of the human race, and that animals and fishes that are found some hundreds of yards under the surface of our earth were once alive and on the then surface, and that old seas have passed away and form now part of our earth's crust, and that they can account for or say how everything was produced, then who can wonder but that a man of strange and elastic imagination could not easily work himself up to the belief of the before-stated opinions of the origin and formation of our earth and its contents? I have related these facts, which have come within my knowledge, simply to show that geology with some persons proves to be a dangerous plaything; my advice to every parent is to strictly prohibit every child from meddling or looking into that dangerous and useless science, Geology.

Having now shown a few of the startling and surprising opinions of extreme believers in the science of geology, I shall endeavour to set forth indiscriminately a few opinions and remarks from Wm. S. Orr and Company, of the milder class of geologists; and their remarks on the form and structure of the earth are somewhat mild when compared with the imagination of other geologists, especially those of whom I have before given you a specimen, and they evidently compare this form and structure of the earth to some animal or human being, as they commence describing it, by saying "The earth may be considered as having

the general outlines of its form derived from the great mass of underlying rocks, which we may therefore regard as the bony framework or skeleton. Clothing this framework, as the flesh conceals and covers the skeleton, is a mass of matter originally obtained from the degradation and wearing down of the older and fundamental rock masses, and now exhibited generally as stratified and detrital material, retaining here and there the old form, and not unfrequently penetrated by the ruder and more angular projecting angles, but still characterised by more regularity and tameness, the external surface usually shows a yet further softening, corresponding perhaps with the skin, as the stratified masses do with the muscle, and when draped with vegetation completing the development of form."

It appears very plain to me that they have stated their opinions of the earth's formation in rather a mystical and emblematical sort of way. They evidently show by their statements that the materials which compose the bowels of the earth have undergone very marvellous changes, and by that they indicate the before-stated opinions of other geologists, where they suppose that the different strata and layers of the earth's material were formed by the lapse of an innumerable number of years before the introduction of the human race. You can trace it all through the remarks made by them. For instance, they say that the flesh which conceals and covers the

framework or skeleton of our earth, is a mass of matter originally obtained from the degradation and wearing down of the older and fundamental rock masses.

Now as the mass of matter was originally obtained, which means primarily, with regard to the first cause, that also shows an antique origin; and as this mass of matter was taken from the degradation and wearing down of the older and fundamental rocks, it also appears from these words that they evidently meant to show that the formation was of a very remote period; because the word degradation means deprivation of an office or dignity. This word shows that they had been in use before, as they were deprived of office; and again, the word fundamental, used above, shows by its meaning,—viz., serving for the foundation—an essential, not merely accidental, leading proposition, that part on which the rest is built: this word fundamental shows clearly that the professor's opinion is founded upon the same basis as his brother geologists, as regards the antiquity of this earth's formation. They also say that it appeared to retain here and there the old form, and was not unfrequently penetrated by the ruder and more angular projecting angles. This remark also shows the same description of their opinions, because they say that it appeared to retain here and there the old form, that is evidently showing that they believe it to have been formed previous to its penetrating the other rocks,

because they use the word, the old form ; they also remark that it was characterised by more regularity and tameness. It certainly seems to me to be a very mild and tame way of attempting to show up an opinion of the way, and form, and structure of the earth.

I shall now conclude my remarks on this opinion of the formation of the earth, and I have only to refer you to the account in *Genesis* i. c., and there you will find sufficient Scripture proof to show any believing man that as the earth and all its contents have only been made about six thousand years, the before statements of the opinions of those men of science must be wrong when compared to the holy Scriptures, as spoken by God Himself. I have made my remarks, and leave every one to judge for himself.

I shall now further endeavour to show the opinion of these geologists on the formation or origin of the earth. They describe two different periods of the earth, and also show or make various remarks on the probability of its state previous to what they term the first period. It seems that previous to this first period the earth and seas were undergoing a vast number of organic changes ; but animals and birds did not exist during that period, but insects, &c., of their species did exist before the first period of our earth's formation. I shall leave the earth in whatever state it was then, as it appears to be an innumerable number of years by the opinion of geologists,

and shall now see what they say about the first period of its formation.

They commence their opinion of the first period by saying :—

“Judging partly from the general appearance of the various bodies of the solar system, and from astronomical considerations, and partly from the appearances presented by the various rocks at and near the earth’s surface, it is supposed that at a very early period of its history our globe may have existed as an intensely heated body in a fluid or molten state, and that it gradually cooled at the surface, perhaps by exposure in space, contracting in dimensions as it cooled and hardened. In this manner, it may be, a succession of thin solid films or crusts were formed, each one as soon as formed beginning to shrink and crack, until at length, after a number of such broken crusts had been produced, a certain balance was attained between the thickness of the crust, the rate of cooling, and the amount of internal heat. This would not have taken place until the production of a rough, uneven surface, having many elevations and depressions, nor until the temperature had been sufficiently reduced to allow of an atmosphere and permit the permanent presence of water reposing in the hollows and forming seas and oceans, until the time when water could exist without being converted into steam. We cannot imagine the possibility of any

organic beings existing either upon or beneath the surface, although at any temperature below that of boiling water both vegetable and animal life is possible, even under the limitations with which we are familiar. Thus, then, according to this view, the first period of the existence of the earth as a planet was marked by a chaotic state of igneous fusion, and characterised by frequent disturbances of the surface, the effect of contraction during the cooling of the successive films or pasty crusts of oxidised and half-solidified rock. As soon, also, as water was present, we may suppose that its action would be exerted in grinding down and depositing in a mechanical form the detritus of the older and igneous rocks; and in this way we seem best able to account for the nearly uniform character of the ancient granitic rocks, and those most directly associated with them in various distant parts of the globe."

Although these gentlemen have given us a milder statement of their opinion of the earth's formation (during the first period) than the accounts stated in the previous paragraphs as opinions of other geologists, nevertheless this paragraph alone on the first period is something calculated to set the world thinking, and to startle a true christian believer, one who has been all his life through clinging to those blessed truths found in holy Writ, and also been under the impression that God alone made this earth

and all its contents, and has been believing they were made in one day, namely, the third day, in the first week ; that is, three days previous to the introduction of our forefather Adam. Now which way is he to take for the future ; to believe the imaginary opinions of geologists, or believe the unerring truths of the holy Bible ? It certainly is calculated to make or cause a fickle, unstable, frail-minded person to waver, and also to cling firm either to one or the other, because he can see clearly that he cannot hold to both.

I will now comment on the opinions given, as before stated, by these scientific gentlemen, and see how far they will differ from the holy Scriptures and common sense. They first begin to introduce this beautiful earth's origin by stating that before the first period of its formation there were seas, insects, &c., upon the face of the globe ; but at the introduction of the first period of our earth's formation they suppose that our globe (which signifies the whole body altogether) was an intensely heated body, in a fluid state, or molten mass of fire. Now here is a state of things ; the whole of the globe at this time to be as fluid fire, from the centre to the exterior. If this was the case at the beginning of the first period, what became of the old seas of water and the earth's contents ? As a matter of course, they must have been all burnt up, and the waters all dried up ; consequently all things that before existed must have been turned into fluid

or liquid fire. Now if this globe had been converted into a mass of liquid fire, how did it hold together? There must have been a casing of some sort to retain the fluid fire in its proper position. Again, they say it gradually cooled on the surface. Now this, without going any farther, proves that these gentlemen are of the same opinion as regards the antiquity of the earth's formation, as before stated by other geologists; because if this globe at the first period was a complete mass of liquid fire, we may judge from our experience of the time it takes to cool some of our monster castings, that a body of liquid fire of such immense dimensions would not be likely to have been cooled down in less than billions of years. Here is the proof again that geology does most certainly contradict the Scriptures, because here they are attempting to show that the earth is being produced by stages, passing through an incalculable number of years; and the Scripture tells us positively that it was not produced from natural causes, but that it was made by God, the great Creator; and also in *Genesis* i. c., 9 v., God said, "Let the waters under the heavens be gathered together unto one place, and let the dry land appear; and it was so." This plainly shows that God alone made this earth; and if you will read the fourth commandment, that is the most positive instance we have in holy record of where the words were uttered by the very mouth of the great and benevolent Creator. What does that mean?

Why it is plain enough for babes and children to understand, viz., "For in six days the Lord made heaven and earth, the seas, and all that in them is." Now who would pretend not to understand these plain instructions? If He made the earth He then stood on, and all that therein is, how is it to be believed that it came from, first, liquid fire, then by cooling processes, until ultimately it underwent various changes caused by the lapse of an immense number of years, till eventually it became in a state ready to produce vegetation. What a fearful mistake is made to attribute the grandeur of the formation of this wonderful earth to natural causes! Why not say that God alone made this earth and all its contents, and give him the credit and glory that is due to him by first making for us such a mysterious and useful earth, and next for being so kind as to inform us, as He did from the top of Mount Sinai, who did make this earth, and things therein, viz., God himself. Refer for proof to *Exodus* xix. c., and *Exodus* xx. c., 11 v., and you will then be fully convinced of the authenticity of this statement. They go on to state that after the earth or globe of liquid fire began to cool down and form a hardened crust or surface, it then began to crack, when the temperature or heat had been reduced to allow of an atmosphere and permit the permanent presence of water reposing in the hollows and forming seas and oceans, until the time when water could exist without being converted into steam.

This part of their opinion seems very absurd to me, because they say, "When this globe of liquid fire had cooled down a little so as to admit of an atmosphere." Now this is as much as to say, that the atmosphere was introduced by natural causes; and also that while this immense heat was going on there really was no atmosphere. I cannot see, myself, how they are likely to know that there was no atmosphere. I contend that if the whole globe had been a complete mass of liquid fire, an atmosphere could have existed just as much as one could exist at the present day. There was nothing in immense heat to prevent an atmosphere from existing, all that would have taken place was simply this, the atmosphere would have been heated by the immense body of fire, and it could have passed off and fresh air taken its place to have become heated. Just refer to our air-furnaces, and there you will find that atmosphere exists close to the immense body of heat; it only heats the air that comes in contact with it and passes off again, and fresh takes its place; air will stand heating by fire to any degree of heat, consequently I cannot see why they should fancy that the globe was all on fire in the absence of air; common sense tells us that fires could not burn without the presence of air.

Now they say that after the atmosphere was introduced it admitted the permanent presence of water reposing in the hollows, and forming seas and oceans, until the time when water could exist, without being

converted into steam. By this they actually fancy that the cooling down of this surface of liquid fire brought on contraction and expansion so rapid that it disturbed the crust that had cooled, and by that means had so distorted the surface as to make it uneven, something like it appears at the present day, with cavities, hills, and vales, &c., and that the permanent presence of water was admitted, reposing in the hollows and forming seas and oceans.

This appears to me very remarkable, because they mean by saying after the atmosphere was introduced to admit of water, to form seas by filling up the cavities caused by the rapid cooling of the earth's surface, water and air were then introduced, for a given purpose; and also, it appears strange to me if there was not one pint of water on the surface of the globe, which we are positive there could not have been during the time the globe was all liquid fire; then, if it was so, where did all the water come from to fill up these cavities to form immense seas and oceans; how is this to be accounted for? Why common sense says, that water was never absent from this globe or earth; and Scripture says, that the earth's surface was all covered with water and darkness six thousand years ago; so that you see geology is contradictory when compared with the Scripture.

The last part of their remarks on the earth's formation of the first period says, "That they don't

believe any organic beings existed either upon or beneath the surface of the earth during the time of the globe being in a state of liquid fire." This is the most important part to be relied upon, as a real fact, because it agrees so much with common sense, as everybody would readily believe that nothing could live or exist in or on the globe during that time, and I wish all they say of this earth's formation was as plain as this simple truth ; how innocent the science of geology would then appear.

They lastly say, that after the surface of the earth had from cooling become pasty crust, or half solidified rocks, and as soon as the water was present, they suppose that its action would be exerted in grinding down, and depositing in a mechanical form, the detritus of the older and igneous rocks.

Now what a curious finish, as their opinion of the formation of the first period ! They think that after the surface had cooled down it began to form a pasty sort of crust, or half solidified rocks ; they also fancy that when the water was introduced it would be always on the motion, because they say it would have a grinding sort of tendency, and would deposit, in a mechanical form, particles of the half-formed rocks, and carry on this process till immense deposits and alterations had taken place. It seems to me to be one of the most flimsy and elastic imaginations ever conceived by any man ; in my opinion it outvies all fairy tales ; talk of Sinbad the Sailor, or Aladdin and

his Wonderful Lamp, in the "Arabian Nights' Entertainments," they cease to become wonders of the power of imagination, after being compared with the opinions of these geologists as to the formation and origin of our earth.

Having now concluded my remarks on the geologists' opinions of the first period of the earth's formation, I shall endeavour to show you their opinions on the second period or epoch of the earth's formation. There are small minor matters that they mention of things and changes taking place between the first period and the commencement of the second epoch, which, if I were to relate all the parts, and give my opinion of them, it would make a work of many pages, and as I intended at first to only give a brief account of my opinions on geology, I am compelled to condense the subject as much as possible.

Their opinion of the secondary epoch commences as follows :—

"We suppose, therefore, that at the end of the first period of the earth's history it existed as a globe, perhaps of somewhat larger dimensions than it is at present, but still partly covered by water, and surrounded by an atmosphere. Of the land that rose above the surface of the water, some portions even then exhibited a distinctly stratified appearance, and the thick masses of strata rested on huge bosses and peaks of granitic rock newly forced up by constant

hevings of the liquid fire beneath. On their surface, however, all was then bare and desolate. Not a moss nor a lichen covered the naked framework of the globe; not a seaweed floated on the broad ocean; not an animalcule was present in the whole of the wide expanse—all was still with the stillness of absolute death; the earth was prepared, and the fiat of the Creator gone forth; but there was as yet no inhabitant, and no form of life had been introduced to perform its part in the great mystery of creation.

“Although in the nature of the mineral accumulations during the Devonian period we seem to have an intimation of the existence of land near our present coast-line in various parts of the world, yet there is none of that evidence which the actual existence of the very inhabitants of land give until we reach quite the close of the period, and come to the carboniferous rocks. In Devonshire, indeed, and perhaps in Ireland and elsewhere, vegetable fossils are found in the older shales, marking the spot where land first appeared; but these must be regarded as exceptions to the usual condition. We are not, however, to suppose that, because there is for the most part an absence of land fossils in the Devonian rocks, there was therefore little land at that time above the surface of the sea. Nothing can be more likely to lead to error than this hasty judgment from first impressions, and in the case under consideration it is most likely that during the whole of the silurian and Devonian period land

had been increasing in the northern hemisphere; that at the close of the Devonian period it attained a maximum, and that immediately after it began to sink. But this early land was not placed where we can now find actual traces of its existence. Perhaps it was a first Atlantic occupying a vast space now covered by the great Atlantic canal separating Europe and America. It is, however, possible that a portion of Northern Europe was even then elevated above the sea, and formed dry land."

I shall now make a few remarks on their opinion of the secondary epoch of the earth's formation. I shall compare it with common sense and the holy Bible. They commence by stating, "That they suppose therefore that at the end of the first period of the earth's history it existed as a globe, perhaps of somewhat larger dimensions than it is at present, but still partly covered with water, and surrounded by an atmosphere."

Now when we compare their opinions with common sense, it seems to differ very much. For instance, they say that the globe at the end of the first period of the earth's history was of somewhat larger dimensions than it is at present. How can that be accounted for when there was no deposit of anything at the end of the first period, and according to their own statement all deposits have been made since the first period of the earth's formation. If so, the deposits

being of so immense a nature, averaging even over the coalseam three hundred yards, I should like to know how the globe was larger at the end of the first period, before any deposit was made, than it would be after there was three hundred yards of material or earthy matter added to the globe all round it? Common sense says it would be larger in the present day than it was in the first period, because it has had the three hundred yards of deposit attached to it since the first period, as shown by their own statement.

They also say, "But still partly covered with water and surrounded by an atmosphere." Now this is directly contradictory when compared with the Scriptures, because the time of the beginning of the second epoch of creation, according to their showing, was millions of years before the introduction of man, and Scripture tells us plainly and correctly that the earth was made on the third day, and man on the sixth day; consequently the Scripture says it was only three days from the day earth or dry land appeared and the day Adam was created; so that what the geologist is attempting to show took thousands and millions of years to produce, Scripture says was accomplished in three days; now the two cannot agree with each other.

You will also find that they say, "After the earth was partly covered with water that more land made its appearance above the level of the sea, and the

thick masses of strata rested on huge blocks of granite rock newly-forced up by constant heavings of the liquid fire beneath."

Now how is it likely that by the cooling of the interior of the globe it could heave the solidified parts so high as to make them appear above the level of the sea? Why common sense says *vice-versa*, because from our experience in small masses of liquid metals contraction takes place from cooling, and consequently, the more the globe cooled, the more it would contract, and the lower it would sink the rocks at the bottom of the sea, and in no instance would it have any tendency to swell from the cooling process.

They also say, "That those bodies of strata that did rise (by the interior of the earth collapsing in cooling) above the level of the sea had not a bit of moss or lichen to cover the naked framework of the globe, not even a sea-weed floated on the broad ocean, not an animalcule was present in the wide expanse, all was still, with the stillness of absolute death."

Let us now see what wonderful foresight geologists appear to attain, because they can look back some fifty or a hundred millions of years, and venture an opinion as to the state of the crops in that day, which they describe as being very meagre, and even the whole world altogether was not producing one atom of anything, nor was the sea able to produce even the smallest sea-weed; even they outvie all the astronomers of the present day, because they can tell

(according to this statement) even how the weather was in those days; the wind certainly did not blow, because they say, all was still, with the stillness of absolute death.

They finish this sentence of their opinion of the second epoch of the earth's history by saying, "That at this time no form of life had been introduced to perform its part in the great mystery of creation."

It seems a great mystery to me how and where these scientific gentlemen get their information from. If we were to summon all the astrologers, and sooth-sayers, and men of deep craft, to be found in the whole world, to a meeting in the Town Hall, at Birmingham, and ask them to inform us what sort of weather it was ten thousand years ago, and also what crops were growing in those days, they would laugh at our folly for expecting them to be able to know anything about such distant mysteries, and yet we have the science of geology revealing an hundred times a more mysterious question; for instance, they seem to even know for a certainty the state of the weather, the crops that were growing, and also that in the whole earth and sea there was not one living thing as far back as some millions of years. For instance, as regards the weather in those days, there could be no wind blowing, because they say, all was still, with the stillness of absolute death.

Now we all know that this remark could apply to no tempestuous weather; if it was as still as death,

their report of the weather would be equal to saying, "Weather, fair and mild." Now their opinions of the state of the crops in those days are very definite, and stated plainly enough for a child to understand that they were of a bad and meagre description, because they positively say, "On the surface, however, all was then bare and desolate; not a moss nor a lichen covered the naked framework of the globe, not even a seaweed floated on the broad ocean." Who can say but this is a bad account of the crops some millions of years ago? Lastly, they seem to know how the globe was in those days; as regards living things, they positively say that nothing was living in the whole world, viz., "There was as yet no inhabitant, and no form of life had been introduced."

Having finished my remarks upon their opinion of the first part of the second period or epoch of the earth's formation, I shall proceed to show their opinion as to the perfecting of the earth's formation during the second period. They go on to say:—"There was, however, we may be assured, no long interval between the moment when organic life could exist, and that in which various tribes were introduced. Thus, for example, in the lower silurian rocks are described some fucoids or seaweeds, not a few plant-like animals, scarcely removed from the seaweeds in point of organisation; quite at the close of the period, and not till some thirty or forty thousand feet of strata had been deposited in one spot, a few fishes' remains appear,

but they nowhere seem abundant; they were very small in size, but ferocious and predacious in their habits, and allied to the present shark tribe."

It is plain to be seen that these gentlemen think life was introduced in the smallest possible way to commence with, and so gradually improved and increased till ultimately the earth and seas produced abundantly. They commence by stating that in the lower silurian rocks are some fucoids or seaweeds, and not a few plant-like animals. This is almost showing that animals have their origin from seaweeds; also they say, "quite at the close of the period, and not till some thirty or forty thousand feet of strata had been deposited." Now is it likely for geologists or any other men to know what is in the earth forty thousand feet deep, when in the present day no explorations have ever reached the depth of two thousand yards from the surface? And these geologists are talking about the fossil remains some forty thousand feet below the level of the earth's surface, which is more than eleven thousand yards! Now as no such depths have been reached in England, perhaps when those fifty gentlemen in France who are making such preparations to go to find out the mysteries of the North Pole, and very likely as they are going on such gigantic explorations, if they should possibly find them excavating to the depth of the eleven thousand yards, and consequently when they return should happen to report such facts, found out through their

patriotic zeal for explorations, then, and not till then, shall we have any proofs of depths ever being heard of to such a fearful extent as eleven thousand yards, to allow them a chance to find a few fishes' remains, as stated by these geologists. They say the fishes were very small in size, but ferocious and predations in their habits, and allied to the present shark tribe.

Here again is the astrologer outdone, because the geologist not only tells you what is in the bowels of the earth eleven thousand yards deep, but he also tells you that the fishes were small, and he actually knows how they were constituted, namely, that they were "predations," which is, living on prey. Only just fancy a man giving an opinion of what is in the bowels of the earth eleven thousand yards deep, and also telling us what things lived one hundred millions of years ago; and also what the habits of those living things were then! I think you will coincide with me by saying that no such wonders can be heard of or found in any other science except that mysterious and unfathomable science, Geology.

I shall further quote their opinions of the progress of the second epoch of the earth's formation, viz. :—

"Still, no doubt the condition of the silurian ocean would have a strange aspect, with something of resemblance to the modern seas. There would be myriads of unsightly animals, some of them of gigantic proportions, would float in clouds in the water, seeking

food, swimming with their backs downward, and ready to sink to the bottom at the slightest approach of danger ; further out at sea, and attached to the rocky bottoms, we should have the elegant forms of the sea lilies, waving their living stems and branches."

It appears very strange to me that immediately after this globe represented a molten mass of fluid fire, and the process of cooling had gone on so as to form a crust or casing to the interior of the globe (which would be still liquid fire) till hardened down by cooling ; because here we have them talking about the silurian ocean having a strange aspect somewhat resembling our modern seas. Now this is very evident that this ocean they talk of is not meant to represent our present seas ; if not, it must have been an old ocean or sea that has passed away, and the modern seas of the present day certainly must, according to their statement, be fresh ones since the second epoch of the earth's formation. How easy it appears for these gentlemen to talk of old seas passing away and new ones being introduced. Now where is the water to go to when the old sea passes away ? then again a greater difficulty to understand is, where do they account that the immense body of water came from to form a new ocean or sea, as they suppose ?

Let us just trace how often the water has been dispersed and called into existence again between the first and second epoch of the earth's creation. First, at the time the globe was all liquid fire, as a matter

of course, that dispersed all signs of water from the globe. Then, as soon as the hollows and cavities were formed by contraction and expansion in the casing or crust of the globe, water made its appearance, as stated, and in such quantities as to form seas and oceans. And again, after a time this must pass away, because it says the silurian ocean, which was the first water introduced since the globe cooled down, very much resembled the seas of the present day. Now by this statement, the silurian oceans must have passed away; and lastly, the present seas must have been introduced since, because they could not have been the silurian or old seas from the account given us by the former statements, consequently, according to that statement, our seas and oceans have twice passed away, and twice been introduced again. Now if we refer to Scripture we can find no proofs of the seas ever once having passed away; but we can find that they were once introduced, about six thousand years ago, when the Almighty God said those precious words, *Genesis* i. c., 9th and 10th v., "And God said, let the waters under the heavens be gathered together unto one place," "and the gathering together of the water called He seas."

If we read the Scriptures, we can find no account of either the seas or the earth ever having passed away since they were called into position by their great Master, which they readily obeyed. At the very sound of His voice they appeared in one day,

just as we find them now ; because the Almighty says, " As it was in the beginning, is now and ever shall be." These gentlemen seem inclined to amuse us again by the latter part of their statement, viz :— After describing the old silurian oceans by comparing them to our present seas, which shows they suppose them to have been of a vast extent of water, they say " there would be myriads of unsightly animals ; some of them of gigantic proportions, would float in clouds in the water, seeking food, swimming with their backs downward, and ready to sink to the bottom at the slightest approach of danger." Here are all the astrologers and soothsayers outvied again, because these gentlemen are not only telling us that there were fishes and animals some millions of years before the present seas were called into position, but they actually describe their appearance as being unsightly, and their quantity by saying myriads, and clouds of them floating in the water ; also they seem to be acquainted a little with the size of them, as they say some of them were of gigantic proportions. But the most mysterious and amusing part is to think that they should actually know their habits of living, which they do by knowing their habit of feeding, viz., " Seeking food, swimming with their backs downward, and ready to sink to the bottom at the slightest approach of danger." They finish the sentence by saying, " Further out at sea, and attached to the rocky bottoms, we should have the elegant

forms of the sea lilies, waving their living stems and branches."

If you will just refer back, you will see that these gentlemen said at one time that not even a seaweed floated upon the broad ocean, and now they are not only telling us of the first appearance of plants, but describing them as elegant sea lilies. After reading these statements, who can help being astonished and puzzled, to think and wonder, how it is possible for any mortal man to be able to fathom such hidden mysteries as telling what a sea or ocean was producing billions of years before the present sea was ever made, viz., "The old silurian ocean produced nothing at one time, and then afterwards it was producing magnificent flowers in the shape of sea lilies." What startling imaginations, if these are the proofs how geologists attempt to show their skill in the science of making or searching out the origin or formation of our earth. I, for one, must have something more sound and logical before I put any faith in the science of geology being able to elucidate even the slightest mystery connected with the earth's formation. I am of the opinion, as found in the holy Scriptures, *Ecclesiastes* viii. c., 17 v., viz. :—

"Then I beheld all the work of God, that a man cannot find out the work that is done under the sun, because though a man labour to seek it out, yet he shall not find it; yea, farther: though a wise

man think to know it, yet shall he not be able to find it."

Also, *Ecclesiastes* iii. c., 11 v., says, "He hath made everything beautiful in His time; also He hath set the world in their heart so that no man can find out the work that God maketh, from the beginning to the end."

These geologists further state that after the silurian seas had been introduced, different kinds of fishes were continually being introduced, till all at once land is going to make its appearance, which you will see by the following account of these gentlemen, viz. :—

"Although in the nature of the mineral accumulations during the Devonian period we seem to have an intimation of the existence of land near our present coast-line in various parts of the world, yet there is none of that evidence which the actual existence of the very inhabitants of land gives, until we reach quite the close of the period, and come to the carboniferous rocks. In Devonshire, indeed, and perhaps in Ireland and elsewhere, vegetable fossils are found in the older shales marking the spot where land first appeared; but these must be regarded as exceptions to the usual condition."

They seem, by the above statement, to be led by mineral accumulations to fancy that land had made its appearance about where our coast-line is now in

various parts of the world ; but having found some fossil remains or likenesses of animals, trees, and birds, about Devonshire, they directly come to the conclusion, and state as their opinion, that Devonshire and Ireland were the places where land first made its appearance. What presumption for man to attempt to show and mark out the spot where land made its first appearance. By this statement they show plainly that land has been produced gradually and steadily. How does this agree with thorough believers in the holy Bible ? How can they think that it agrees with the very word of God, as spoken to Moses on Mount Sinai ? Either their account is wrong, or the fourth commandment, because in the fourth commandment God said, "In six days I made everything that is in the sea and the earth, and I also made the sea and the earth in the same week." If this was true, and all christians believe it to be so, how can these geologists' accounts of the sea coming by natural causes, and the land coming also by natural causes, by steady degrees, ranging over millions of years, be true, when the holy Scriptures tell us so plainly that the sea, the earth, and all their contents, were made in six days ? Now this proves, without the slightest doubt, that the science of geology is contradictory when compared with the Scriptures.

I shall now further quote the progression of the formation of the second period of the earth as stated by these geologists, viz. :--

“We are not, however, to suppose that because there is for the most part an absence of land fossils in the Devonian rocks, there was little land at that time above the surface of the sea. Nothing can be more likely to lead to error than this hasty judgment from first impressions; and in the case under consideration it is most likely that during the whole of the Silurian and Devonian period land had been increasing in the northern hemisphere, that at the close of the Devonian period it attained a maximum, and that immediately afterwards it began to sink; but this early land was not placed where we can now find actual traces of its existence. Perhaps it was a first Atlantic, occupying a vast space now covered by the great Atlantic canal separating Europe and America. It is however, possible that a portion of Northern Europe was even then elevated above the sea, and formed dry land.”

In my opinion, these geologists are making very sad blunders, and also they lose sight of the Scriptures; because who can read the above paragraph without being convinced thoroughly that these statements are diametrically opposite to our Scripture record of Creation? Besides differing from Holy Writ, they are contrary to common sense; also, because this paragraph begins by showing more clearly than the last that land did make its appearance and steadily increase, as they say no fossils could be found in the

Devonian rocks ; we are not to suppose there was little land at that time above the water of the sea, *contra*, it is most likely that, during the whole of the silurian and Devonian periods, land had been increasing in the northern hemisphere. This account shows clearly that they suppose the land to have made its appearance in a steady and progressive rate, very similar to and resembling the growing of plants, as they just make their appearance and then steadily and slowly increase till they arrive (like the statement of the earth's production) at a state of perfection. They also state that "at the close of the Devonian period it attained a maximum, and that immediately after it began to sink. This early land was not placed where we can now find actual traces of its existence."

How these gentlemen twist and twirl the seas and land about. We have had instances before where the seas were brought into existence and suddenly to disappear or pass away, then to suit the opinions and imaginations of geologists they are again brought into existence, and so pass away again. In the paragraph above we are now being stuffed with the same indigestible imaginations respecting land, viz., before the first period land and seas existed ; at the introduction of the first period they all together, both land and seas, were transformed into a complete mass of liquid fire ; then it all cooled at the surface, and by some secret in nature's laws all the surface got a

supply of water, from whence they omit to say ; then dry land makes its first appearance in Devonshire and Ireland ; then in the Northern hemisphere—it was producing a good, steady, increasing crop ; till at last the crop was thoroughly ripe, and had reached the maxim, that is the greatest point of perfection ; then, all at once, like the account before given of the disappearing of the seas, it vanished, no more to be seen, viz., it began to sink, and this early crop of land has never been heard of since, and not even a trace of it can be found anywhere ; the only idea that strikes these puzzled geologists is, that they are sorry they have lost it, but as they cannot find it, they are venturing an opinion as to where they think it is, because they say, perhaps it was a first Atlantic, occupying a vast space, now covered by the great Atlantic canal separating Europe and America. Did ever anyone see or read of such wonderful imaginations ? I feel satisfied that nothing in the “Arabian Nights’ Entertainments” contains anything approaching the wonders these geologists are imagining. As far as comparing the above stated opinions with common sense, as a matter of course it will be seen in a moment that there is no comparison ; and as to Scripture, I need not quote any particular passage to show that it is contradictory when compared with the Scriptures, and every true christian believer can find any amount of Scripture proof to disagree with the before-stated opinions as to the advance-

ment of the second period or epoch of this earth's formation.

I shall now show the further progress of the earth's formation in the second period, as given by these geologists. After the first land had made its appearance in Devonshire and Ireland, and suddenly sunk down to form a passage of seas for us to be able to sail over and cross the Atlantic to America, land then sprang up again in Northern Europe and other places in succession, ready to receive a deposit, as stated by these gentlemen, viz :—

“ Above the carboniferous limestone a deposit of hard coarse sandstone supervenes frequently in England, of such a nature as to be valuable for millstones, and thence called millstone grit. It often contains bands of coal, though these are usually thin and of small value. It is a somewhat local deposit, being almost confined to England, and forming indeed little more than a sandy base of the coal measures ; it contains no characteristic fossils.

“ Next in order comes in that great and important series of sands and shales, whose associations with available mineral fuel renders them of infinite value to every country in which they are found. These beds, called the coal measures, are often the only, as they are always the most essential representatives of the great carboniferous series, whose title is hence derived. They are widely distributed in England,

Wales, Scotland, and Ireland ; in Belgium, France, and Spain ; in many parts of Western Germany ; in Bohemia, Saxony, and Silesia ; on the banks of the Don, on the shores of the Black Sea, in various parts of Asia, and in the islands of the Southern Seas. Similar deposits, of the same age, and of still greater extent, occur in several parts of North America, both on the eastern side and in the great Mississippi Valley."

The account given us by these gentlemen of the millstone grit is not accompanied by any explanation of how and where this millstone came from. It seems to baffle even their imaginations to form any solution to so great a wonder of creation. If this deposit had been regular, and to be found in every country, then they would attempt to show some feasible reasons as to how and where it came from. As millstone grit is only found in two or three places in England, viz., Bilston, near to Worcester, and the greater quantity in Derbyshire, hence the puzzle. It seems so singular, according to the theory of the geologist, that such beautiful grit, in such enormous quantities, should all concentrate itself in one particular locality by their fancied system of deposit. This certainly does baffle even their elastic imaginations, because they cannot solve this problem in the earth's creation ; it defies them to even make a sensible suggestion. They cannot say of it, like the

coal seam, that it was made from vegetable matter ; also it would not do to say that it was produced like the coral reefs, chalk formation, and other such layers or strata, which they solve by supposing them to have been formed by animalcule. As it was not produced by vegetation, nor by small animals, nor by washing of the waters, nor by any other way known, then how was it produced ? Why, so easily, that a child might understand, viz., it was placed there amongst the other valuable layers and strata of the earth in one day, about six thousand years ago ; on that day that our great Creator stored and sealed up all things for our future wants and requirements, which he certainly did, on the third day of the first week.

When the Almighty Creator ordered land to make its appearance, it did so, and was perfect in every respect, especially as it contained everything that the Almighty had the intent to bestow upon favoured man ; also all things that we find in the bowels of the earth were stored up there till the day that we should require them ; and the surface of the earth was coated with soil of such wondrous powers of production that it was capable and does produce all life-sustaining properties, such as food and raiment, timber, and every other necessary required for our use and comfort ; so that in one moment of time the Almighty called into existence a complete storehouse filled with sufficient things to last man from the beginning to the end of his allotted pilgrimage on this earth. No

productions from natural causes could have supplied so perfectly the wants of man, and as long as I live I shall give God Almighty the credit for supplying all these wants as found in the bowels of the earth, and our wants as supplied from the surface of the earth. We should be exceedingly ungenerous if we were to be like Pharaoh's magicians, attempting to show that the works of the Almighty can be imitated by natural causes. For my part, I consider the attempts of Pharaoh—in endeavouring to show by the skilful imitations of the magicians, that what Moses and Aaron declared to be the works of the great God were nothing more than things that could be produced from natural causes—are only emblematical and typical of the attempt made upon us by some geologists, as geologists will not acknowledge that the Almighty made this earth and sea in one day, as said (by the Almighty God himself through Moses), which, if we are to believe, it most certainly shows that geology is contradictory when compared with the Scriptures.

They finish the former paragraph by saying, "That next to the millstone grit in order comes in that great and important series of sands and shales, whose association with available mineral fuel renders them of infinite value to every country in which they are found. These beds, called the coal measures, are often the only, as they are always the most essential representatives of the great carboniferous series, whose title is hence derived."

You will see that we are now getting near to the first subject I treated upon in this work, namely, coal. As I gave a full and explanatory opinion of the geologists', and also my opinion as to the formation of the coal seam, I shall make but very little remark upon this subject; but cannot pass over it without showing you the opinion of the before-named gentlemen as to the origin and formation of coal.

I shall now quote the opinions of these gentlemen on the formation and origin of coal, viz. :—

“Having now passed in review the various kinds of fuel used for ordinary heating purposes, and having seen that, of all these, coal is the most valuable, and the best adapted for general use, we shall find it interesting to consider more closely the exact nature of this substance, and the circumstances under which it appears to have been formed. Presented, as we know, amongst the earths, and clays, and stones, that make up the external film or crust of the earth, formed manifestly under very similar circumstances, and in association with water, proved both by its own texture and structure, and by the frequent presence of leaves and trunks of trees, to be very closely connected with the vegetable kingdom, there now remains no doubt, in the minds of observers, that this mineral fuel is nothing more than a modification of what is still so abundant, and so rapidly multiplied—the pleasant green covering of the earth, the herbs of the

field, the trees of the forest, or the rank luxuriant growth of the swamp. It is to these and these only that we owe the stores of brilliant black stone which are more valuable for England than many Californias or Australias; to these we are indebted for the means of rendering available our ores of iron, our copper and lead ores, and our position for trade and manufactures of all kinds, which together are the sources of national greatness; and therefore it is well to go back a little, to seek out the history of the tribes of plants that once grew in these latitudes, whose remains have been handed down from generation to generation, and which still exist, to help us to the solution of some of the most singular and difficult problems in natural history. Of all the plants which clothed and decorated our land at the time of the deposit of these large accumulations, since converted into coal, only a very few species seem to have been retained in such form as to admit of their being now made out satisfactorily; at least, we are bound to assume this from the limits within which the various specimens are confined, including as they do only the leaves (fronds) of ferns, in a very imperfect and mutilated state; detached trunks and roots, in which it is doubtful whether we really see the external surface or not; a few cones and nuts, and still fewer fragments of flowers and fructification. Interesting and occasionally very beautiful, as these are, they are singularly unsatisfactory in bringing us to conclusions

concerning the climate and other conditions that prevailed in different parts of the world ; but they are all we have to depend upon, and we must endeavour to make out as many points as possible on which we may be satisfied. A climate warmer than ours now is would probably be indicated by the presence of an increased number of flowering plants, which would doubtless have been fossilised with the ferns, whilst a lower temperature, equal to the mean of the seasons now prevailing, would assimilate our climate to that of such cooler climates as are characterised by a disproportionate amount of ferns ; this then, is an argument unfavourable to the theory of central heat having warmed the surface, or of the direction of the poles being so altered as to have exposed Great Britain to a tropical climate. Now it is clear that the mass of vegetable matter forming coal must either have grown where we find it, or must have been transported thither and accumulated by the action of water. If it grew on the spot, it might either have been in the way of moss forming peat bogs or a continued accumulation of leaves and trees, there being, in either case, a possibility of the deposit being continued till it had attained a vast thickness, judging from the nearest parallel instances of the present day. If it were drifted, it may either have been so by river or marine currents, thus, then, the nature and history of coal have been traced, and we see this substance reduced to its true position as a mass of vegetable

matter originally bedded with clay and sand, and being a component part of the mineral substances forming the earth's crust. We will next consider how far this position is available, and under what circumstances a substance so useful and so abundant can be best obtained."

I have here fully stated the opinions of these geologists respecting the origin of coal, and shall make a few brief remarks on their views, which will show that these gentlemen hold just the same principles respecting the origin of coal as those described in my introductory paragraph, they being the opinion of the general body of geologists on the origin of coal. They commence their opinion of the origin of coal by saying that, after passing in review various kinds of fuel used for ordinary heating purposes, the kinds of fuel they speak of are peat, wood, and lignite; they give a detailed statement of their production and usefulness, being an ancient substitute for coal, as they were in the early part of this earth's history the only source of fuel to be then obtained. Then, after treating on these minor kinds of fuel, they give us the before-stated account as to the origin of coal. When examined thoroughly, I find it exactly agrees with the opinion of all geologists, they cannot believe any other way possible for this coal to have been placed there than from natural causes. They say it was formed under similar circumstances as the earths,

clays, and stones, that make up the external film, or crust of the earth. Nothing can teach them to believe otherwise. Further, they say, "There now remains no doubt that this mineral fuel is nothing more than a modification of what is still so abundant, and so rapidly multiplied, the pleasant green covering of the earth, the herbs of the field, the trees of the forest, or the rank luxuriant growth of the swamp, it is to these, and these only, that we owe the stores of brilliant black stone which are more valuable than gold mines."

Who can mistake now the opinions of these gentlemen? It is seen clearly that they firmly believe that coal was produced by natural causes, and also that the very coal seam was some billions of years ago the green covering of the earth; consequently, if that was once the surface, all other strata above the coal measures must have been deposited by some means over this seam of coal; and, as I said in my opinion in the first paragraph, I will say again, where did all this quantity of earthy matter come from to form the deposit over the coal? It seems a puzzle to account where such a quantity could come from; but it appears a greater puzzle to me how it was or could have been conveyed in such enormous quantities required to cover the coal seam in all parts of the world. I can see no other way for such wonders to be accomplished than what I find in the holy Scriptures. I cannot give anyone else the credit of being

able to do such mighty works but the great Creator and God Almighty, who said, "Let dry land appear, and it was so." It seems very ungenerous for the geologists to say, after describing the coal to have once been the green covering of the earth, that "they should fancy the coal to have been produced from the herbs of the field, the trees of the forest, and the luxuriant growth of the swamp. It is to these, and these only, that we owe the store of brilliant black stone, or coal." How presumptuous to give way to such weak reliances, by believing that the trees and the herbs of the field alone gave us our valuable coal seams.

Such obstinate absurdities as these, and many other similar notions, when read by young men of preconceived notions that the holy Scriptures are all a fallacy, tend to engender the bitter seeds of disbelief on their reckless and hopeless career through life, for which, through the influences of this wicked science, those young geologists, of whom I gave you a specimen in the preceding paragraphs at the commencement of this work, have nothing else to blame but the meddling with that ruinous science, Geology. If the science of geology should only have been the instigation of leading one poor soul astray, there is mischief in such uncalled-for folly ; and I myself can testify that a great many young men have been lost and become disbelievers in Scripture because geology teaches them that the sacred Scriptures are in error,

and as I have made use of the words before, viz., because they say they choose sooner to believe the evidence of their senses in what they can see in the fossil remains of the rocks and strata of the earth. I have no doubt some men, with a strong and powerful degree of self-control, might possibly read the works on the Science of Geology without being prejudiced against the holy Scriptures ; but it really is a dangerous practice ; it is like children playing with fire or a two-edged sword.

Having now fully shown the opinions of these geologists respecting the formation of the earth, and also their opinion as to the origin of coal, I shall now close this subject by making a few summary remarks. If I had followed up these gentlemen's opinions on the various things that have happened since the formation of coal, this small work, which at first I intended to be but a brief and short account, showing the fallacy of geology when compared with the Scriptures, would have exceeded my intentions. They follow up their discourse by stating that after this vegetable matter had been formed or grown, and decomposed to the depth sufficient for the seam of coal, deposits of earthy matter were placed over this decomposed vegetable matter in alternate layers, through the lapse of many ages, and that time and chemical action, going on in the bowels of the earth, changed the earthy material to solidified rocks and strata, just as they are found above the coal seams. Never once,

in all the works on geology, can you find any account where this great and incalculable quantity of earthy deposit came from ; they very wisely omit to venture an opinion on that subject, but leave their readers to make their own suggestions.

These are the two things that I cannot solve—Where could such a vast quantity of earth be found equal to the enormous layer deposited on the coal seams, and also, how could such a quantity as the whole of it would represent be conveyed as a deposit over the seam of coal ? Anyone might ponder and puzzle at these two questions till the end of the world, and they would be no more likely to find it out than they are at the present day. That mystery in the works of creation will never be known till the Creator and Maker of all things shall think proper to reveal it to man. At the time Moses was on this earth, the Almighty God conversed and spoke more to him than to any other man before or since his (Moses') time, and He never once told him where He fetched all the material from to cover the coal seam ; and also He never told him how He conveyed it over the coal in such systematic layers. Now if Moses—the greatest favourite with God that was ever on this earth, except our blessed Saviour Jesus Christ—then, I say, if He did not choose to tell him where it came from and how He placed it there, no geologist is ever likely to find out such deep and holy secrets. In describing the deposits, they give us a vain and unlikely account

of different animals, trees, birds, and other such fossil remains being found in the different strata of the earth's crust, over and above the coal seam. I shall refer the reader to my introductory remarks on the geologists' opinion of the origin of coal. Then he will find that I have fully explained my opinion on the fossil delusions of these geologists.

If we look back to the whole opinions on the formation of the earth, and also their opinions of the origin of coal, we shall see that most of their explanations are founded not on fact, but simply in the inventive genius of their wild imaginations. They cannot produce any one proof to show where anything came from ; all they adhere to is, that there it is ; and it must have come from the causes which are heretofore enumerated. They seem unaware that the mystery would soon be cleared up if they were to search and ponder over the holy Bible with the same instinctive belief as they do in the researches of that misguiding science, geology. I feel confident that the time is not far distant when the curtain will be lifted that conceals the astounding proof that geology is an unfit science for educational improvement. Our great divines will have their eyes couched, which will cause them to see clearly that geology is one of the enemies of the Christian Church, calculated, if not checked, to undermine the true principles of the holy Scriptures. If I had a dozen children, not one would be allowed the privilege of reading, with my sanction,

any work that contained even one paragraph connected with such dangerous and contaminating influences as are found in the works on geology.

Having now finished my remarks on the opinions of these geologists on the formation of the earth and the origin of coal, I do sincerely hope all that read my statements will be thoroughly convinced that I have shown, as stated in the title of this work, that geology is contradictory when compared with the Bible.

I shall now make a few remarks on the works of Hugh Miller. This gentleman is well known to be the author of many works, viz., "The Old Red Sandstone;" "Footprints of the Creator;" "The Testimony of the Rocks; or, The two Theologies, Natural and Revealed." I find, on reading Hugh Miller's works, that he is a more rational and considerate man towards the Scriptures than most geologists, because he does mention, in many instances, that the Almighty God was the Maker and Creator of all things; and also, he attempts, in the best way he can, to show that his opinions do agree with the Mosaic account given us in *Genesis*, respecting the age of creation. He says, in the preface of his work, entitled, "The Testimony of the Rocks,"—"That there was a time when once he thought and said differently respecting the age of the formation of this earth agreeing with the Scriptures; but now he believed that they agree with each other, and will

attempt to show by his statements that such was true." He says, "He once believed with Chalmers and Buckland, that the six days were simply natural days of twenty-four hours each, and also that they comprised the entire work of the existing creation." But I find as he advanced in the science and the practical knowledge of geology, he became confused in his opinions, simply by finding the likeness of trees, &c., in different strata of the earth, which must, according to all appearance, have been more than the six thousand years buried in the bowels of the earth, so as to cause such changes; here he seems to be at the very point of rejecting his belief in geology; but fortunately for the science he seems to have found a subterfuge to quiet his conscience, and to make the opinion of geologists harmonise with the Mosaic account given us in *Genesis*, because, he says, in the preface before alluded to, "All I found necessary at the time, to the work of reconciliation, was some scheme that would permit me to assign to the earth a high antiquity and to regard it as the scene of many succeeding creations." He says, "I have been compelled to hold that the days of creation were not natural, but prophetic days, and stretched far back into the bygone eternity; after in some degree committing myself to the other side, I have yielded to evidence which I found it impossible to resist, and such, in this matter, has been my inconsistency."

Here you have a proof of my opinion of geology, where I show how dangerous it is for a young man to enter into the secrets of the science, because when once you advance to midway in the belief of geology, it soon furnishes you with puzzles which you find it difficult to surmount, and at the same time to believe the whole of the records in the holy Scriptures. Here you see an example in Hugh Miller. He found at first that Geology and the Scriptures did not agree with each other, touching the antiquity of creation ; but the only way he solaced his conscience was by imaginary fancy in supposing, as he stated before, that it might have been thus : that the six days, spoken of by Moses as the six days of creation, might not have been natural days of twenty-four hours' each, but a prophetic day—there being a great number of years between the introduction of the first, second, third, and fourth days. In that case it would allow the whole of creation to be made and created on six different days, with numberless years intervening between each day of God's work of creation. I will now quote the passage in his work in which he shows how he was reconciled :—

“In 1814, ten years after the date of St. Andrew's lectures, Dr. Chalmers produced his more elaborate scheme of reconciliation between the Divine and the Geologic Records, in a ‘Review of Cuvier's Theory of the Earth ;’ and that scheme, perfectly adequate

to bring the Mosaic narrative into harmony with what was known at the time of geologic history, has been very extensively received and adopted. It may, indeed, still be regarded as the most popular of the various existing schemes. It teaches, and teaches truly, that between the first act of creation, which evoked out of the previous nothing the matter of the heavens and the earth, and the first act of the first day's work recorded in *Genesis*, periods of vast duration may have intervened; but further it insists that the days themselves were but natural days of twenty-four hours each, and that ere they began, the earth, though mayhap in the previous period a fair residence of life, had become void and formless, and the sun, moon, and stars, though mayhap they had before given light, had been, at least in relation to our planet, temporarily extinguished; further, however, he held in addition, that the chaos of darkness and confusion out of which that creation was called was but of limited extent, and that outside its area, and during the period of its existence, many of our present lands and seas may have enjoyed the light of the sun, and been tenanted by animals and occupied by plants, the descendants of which still continue to exist. This important addition, elaborated by its author between the years 1837 and 1839, seems to have been made to suit the more advanced state of geological science at the time."

After reading the before-stated opinion, who doubts the accuracy of the old proverb, "As the bell chinks, so the fool thinks." It is emblematic of geology, because here we see that in 1838 a professor in geology, to suit the more advanced times, thinks of a new scheme how to solve the problem of making geology agree with Scripture, and as he thinks so he prints; and although it is of the wildest specimen of imaginary thought, yet we see and hear of geologists endorsing all his suppositions. Who is there to be found, except geologists, that would attempt to translate the first chapter of *Genesis* into such unreasonable arguments? Everybody else can see clearly that the Almighty did all the work of creation as stated by Moses, viz., "In six days He made all the earth, the seas, and all that therein is, and on the seventh day He rested," *Genesis* ii. c., 1, 2, and 3 v.:—v. 1, "Thus the heavens and the earth were finished and all the host of them;" v. 2, "And on the seventh day God ended His work which He had made: and He rested on the seventh day from all His work which He had made;" v. 3, "And God blessed the seventh day and sanctified it, because that in it He had rested from all His work which God created and made."

Now let us examine these three verses, and see how they agree with the wild statement that so easily reconciled and appeased the conscience of Hugh Miller to the belief in geology.

Dr. Chalmers says, "That between the day that

the light first appeared and the second day, when God divided the waters that were under the firmament from the waters that were above the firmament, periods of vast duration intervened." How can we suppose such to be, when the Almighty plainly shows us, in the second chapter of *Genesis*, that He did not rest from His work of creation till the seventh day? Now if we are to believe the Scriptures, viz., that God did not rest between the first day's work and the second day's work, how can these geologists be correct in saying what is not said in Scripture, viz., that God introduced light, which would be one day's work; then he would absolutely rest, perhaps by their computation millions of years before he came down to perform another day's work? If the geologists' theory was true, the second verse in *Genesis* would have said thus, "For in six days I made heaven and earth and all that therein is, and between each day's work I rested for periods of vast duration; then on the seventh day I again rested, which is to be noticed as the final rest day, which I command all to keep holy, it being the day following that on which I ended all my works of creation." Also, who would suppose that the Almighty would require so much time between each day's work? the very suggestion itself is aiming to destroy the majesty and power of divine authority. It is our bounden duty to be constantly thinking that so great as the work of creation appears by God Almighty being able to make such a

world and all its contents in six days, yet He could, if it were His blessed will, have accomplished far greater wonders in a much shorter space of time than six days.

I have come in contact with a great many geologists in my time who believe thoroughly that the days of creation were not natural days of twenty-four hours each, but that each day would represent an immense number of our present years; and that is their reliance to account for the antiquity of the geologists' opinion in the formation of the earth.

Dr. Chalmers again says, "That previous to the earth and sun, moon and stars, making their appearance as they now are, a fair residence of life had become void, and the sun, moon, and stars, though mayhap they had before given light, had been temporarily extinguished." This is the way he accounts for the Mosaic record; comparing it to, as it were, a curtain of darkness temporarily put over part of the earth to prevent the sun, moon, and stars from shining upon it. Refer to *Genesis* i. c., 16 v., "And God made two great lights: the greater light to rule the day, and the lesser light to rule the night; He made the stars also." Now this Scripture proof gives no hope for belief in the imaginary statement of Dr. Chalmers, because the Scripture says positively that on the fourth day God made both the sun, the moon, and also the stars. If He had said, "Let them appear on that day," it would have given them

some slight foundation to build such frail suggestions upon ; but as God made them all on that day, they most certainly could not have shone or given any light before they were made. Consequently the geologists have made a sad blunder, as usual, in saying that the sun shone on part of this earth before the creation.

Again, see what presumption to think, as said by Dr. Chalmers, viz., "That the chaos of darkness and confusion out of which that creation was called was but of limited extent, and that outside its area, and during the period of its existence, many of our present lands and seas may have enjoyed the light of the sun, and been tenanted by animals and occupied by plants." Now if any one part more contradicts the holy Scriptures than another, this is it, because who can believe this agrees with the Mosaic record of creation ? If most of our present seas and land were then enjoying the sun and tenanted with plants and animals previous to the first day of creation, but were hidden from a small unfinished part of creation by simply the Almighty placing a curtain of darkness between part of our beautiful world, as we now find it, and the part that was not called into existence, then it leaves comparatively little for the Almighty to do, because most of our land and seas were made already ; and also the sun, moon, and stars were made previous to the first day of creation. Now I should like to know which part of our earth Dr. Chalmers

thinks was made on the third day of creation, if most of it was made before? It seems by this account that the Almighty had nothing more to do in the six days of creation than to lift up the curtain of darkness and expose to view all the pre-arranged sun, moon, stars, and most parts of our beautiful earth and seas, also the earth well stocked with plants and animals; and that the waters were not gathered together on the third day, as stated in Scripture, because our seas were in existence before. Also that the sun, moon, and stars were not made on the fourth day, as stated in the Scripture, because Dr. Chalmers asserts that they were shining beautifully before the first day of creation. You will now see that my remarks against the opinion of Hugh Miller and Dr. Chalmers are in accordance with the title of my work, viz., that geology is contradictory when compared with the Bible.

Hugh Miller again makes a feeble attempt to overthrow the Mosaic account of the formation of the earth, as he is here making some more wondrous statements by his supposed proof of argument against the Scriptures, because he actually says that he is in possession of knowledge which bears him out that the Mosaic record, which shows the earth to have been made only about six thousand years, is incorrect, because he can prove the age to be six thousand five hundred years. This is certainly the most minute calculation any geologist ever before expressed,

because most geologists always leave it an open question as to the antiquity of the formation of the earth, as they say, viz., untold ages, or a remote period, or numberless ages, or millions of years, &c. ; showing that they suppose it took so long to produce it from natural causes, that they dare not offer an opinion as to the exact number of years ; and yet we have Hugh Miller showing the precise number of years, and all he relies on for the accuracy of his statement is simply an average calculation ; and I will show by his following remarks that he attempts to prove the above assertions by noticing what the geologists call our old coast-line and our new coast-line. The old coast-line is to be seen at our sea coasts, standing around the shores of Great Britain and Ireland, a flat terrace of unequal breadth, backed by an escarpment of varied height and character, known by geologists as the old coast-line, and on this flat terrace most of the seaport towns of the empire are built. It has the appearance in some places of baylike recesses, and where the recesses are in the rocks, those are the parts that geologists are noticing and making their calculations of, supposing it to have once been our sea coast line, and how long it took for the action of the waves to wash or eat away the rocky material, so as to form the cavities there to be found. They fancy that either the sea was from twenty to thirty feet higher in that day, or else the land was from twenty to thirty feet lower, and that

is how they show that this old coast-line (as they call it) was in a position in those days to be level with the water, so as to make it possible for the water to operate upon the rock, and to be able to form the hollows and caverns seen in our coast-lines in the present day.

Hugh Miller says as follows :—

“That the incidental notice of Diodorus Siculus represents very inadequately the antiquity of the existing coast-line; some of its caves, hollowed in hard rocks in the line of faults and shifts by the attrition of the surf, are more than a hundred feet in depth; and it must have required many centuries to excavate tough trap or rigid gneiss to a depth so considerable by a process so slow, and yet however long the sea may have stood against the present coast-line, it must have stood for a considerably longer period against the ancient one. The latter presents generally marks of greater attrition than the modern line, and its wave-hollowed caves are of a depth considerably more profound. In determining on an extensive tract of coast, the average profundity of both classes of caverns, from a considerable number of each, I ascertained that the proportional average depth of the modern to the ancient is as two to three. For every two centuries, then, during which the waves have been scooping out the caves of the present coast-line, they must have been engaged for three

centuries in scooping out those of the old one, but we know historically that for at least twenty centuries the sea has been toiling in these modern caves ; and who can dare affirm that it has not been toiling in them for at least ten centuries more ? But if the sea has stood for but even two thousand six hundred years against the present coast-line, then must it have stood against the old line, ere it could have excavated caves one-third deeper, three thousand nine hundred years, and both periods united (six thousand five hundred years) more than exhaust the Hebrew chronology. Yet what a mere beginning of geologic history does not the epoch of the old coast-line form !”

What a poor staff to lean upon, for a geologist to reconcile himself to the science, because in the first part of his remarks he tries to make out that geology does agree with the Mosaic record by fancying that although Moses says the earth and all its contents were made in six days—and he attempts to reconcile himself to that belief by saying that there was a remote period between each day’s work—now we find that he is distinctly trying to prove the Mosaic records are false and untrue, because in the latter part of the previous statement of Hugh Miller’s calculation of the old and new coast-lines he distinctly shows that the new coast-line took two thousand six hundred years, and that the old coast-line took three

thousand nine hundred years ; he adds them together, and shows that it took altogether, to produce the old and new coast-line, six thousand five hundred years, and this, he says, more than exhausts the Hebrew chronology. Now I think that this time, not only as I have shown, but as Hugh Miller himself shows, is quite sufficient to prove, as stated in the title of my work, that geology proves to be contradictory when compared with the Bible.

I shall now quote a few of the remarks of Dionysius Lardner, D.C.L., on the formation of the earth. The above Professor of Geology was formerly Professor of Natural Philosophy and Astronomy in University College, London. This gentleman takes the same view as many other geologists respecting the earth's existing state previous to the first period, and commences his introductory remarks on the first epoch as follows :—

“ In mathematical geography and astronomy certain physical circumstances attending the interior of the earth have been developed. Thus it is proved that the density of the globe gradually increases from the surface to the centre, and from its peculiar form it is inferred that at the epoch of its formation the materials composing it must have been in a fluid state ; it has been already shown, in our tract on the earth, that the form of the globe is what in geometry is called an oblate spheroid, a figure somewhat resem-

bling an orange or a turnip. It is therefore inferred from this that the earth, in its original state, and before it assumed its present condition, was a fluid mass, and that while in this fluid state it received the diurnal rotation by which it is now affected, and which produces the vicissitudes of day and night ; it was, therefore, after having assumed this spheroidal form, that its superficial parts hardened and solidified, and, after undergoing a certain succession of changes, assumed their present condition.

“ It has been shown in our tracts on ‘ Terrestrial heat ’ that when we penetrate into the crust of the earth by mines, boring, or other artificial means, the temperature is found to undergo a gradual and regular augmentation. It may be assumed by analogy to increase to a still greater depth in the same proportion at the depth of about forty miles, or about the hundredth part of the entire distance from the surface to the centre, we should arrive at a temperature of four thousand degrees, at which it is certain that no part of the matter composing the earth could remain solid. If the egg of a fowl be imagined to represent the earth, its shell would be much too thick to represent its solid crust.”

I shall now compare the above-stated opinion of the earth's formation to common sense, and see how far they agree with each other. I have quoted this statement of a celebrated professor of geology simply

to strengthen my proof that most geologists are believing, and professing to make it appear, that our earth was produced from natural causes, and they most of them argue that at the first period of the earth's formation it was a complete mass of liquid fire. How improbable that such should be the case; because if it had been so, whenever it cooled at the surface, the cooled surface forming the crust of the earth would have been nothing more or less than a surface of pumice stone, never being capable of being acted upon by the sun's rays; because we have every proof of the truth of this statement in referring to the volcanic eruption, and there you can trace or find the very solidified or cooled liquid fire which in some instances has been cooled for thousands of years; and wherever it is found in a solid state it represents and is nothing more or less than pumice stone, such as is used by the painters to rub down their work before painting. If anyone could show that this cooled liquid fire is to be found anywhere changed by time and exposure till now it is turning into a soil, or soft marl or clay, then I fancy these geologists would have some sort of foundation for the theory they give us by saying that all the strata of rocks, clays, and soil that we find above the igneous rocks were once liquid fire, and by a cooling process and the lapse of time are now transformed from pumice stone to the different kinds of strata found lying above the igneous rocks. Again, they fancy that the

cause that gave a rotary motion to the earth was through the globe being a mass of liquid fire, because he says, "And while in this fluid state it received the diurnal rotation by which it is now affected, and which produces the vicissitudes of day and night."

The above statement contradicts both common sense and Scripture; because he states the diurnal motion of the earth to have been produced by natural causes, showing that in consequence of the globe being a complete mass of liquid fire, that, and that only, was the means by which the earth could receive its spinning motion; and he also says that the vicissitudes of day and night were produced by the same cause. Now of all things ever before advanced by the science of geology, never once did it make such a mistake, because a man with only half the usual amount of common understanding would know that the earth, being a mass of liquid fire, would be the most unlikely thing imaginable to set the globe in a spinning motion; if its being liquid fire was the cause of starting it to spin round, how did the earth hold together before it turned round at all? And again, how could the vicissitudes of day and night be produced by such natural causes as the spinning round of a mass of liquid fire? These are the errors of the science of geology, and when a youth of small experience in the practical knowledge of general things reads such statements as before given, it confounds all he has been taught of the holy Scriptures.

How can he thoroughly believe geology and the Bible at the same time, when he finds that geology tells him that the earth was produced from natural causes—that it commenced from a mass of liquid fire, and that that was the only way in which the rotary motion of the earth was caused, and also the only way in which day and night was produced ; and when he reads Scripture he finds that the Bible tells him that God Almighty made the earth, the sea, and all that in them is, and that He, and He alone, set it in motion ; and that God also made both day and night—for proof, refer to *Genesis* i. c., 1 v., “In the beginning God created the heavens and the earth ;” v. 7 and 8, “And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament ; and it was so. And God called the firmament heaven ; and the evening and the morning were the second day.” *Job* xxvi. c., 7 v., “He stretcheth out the north over the empty place, and hangeth the earth upon nothing.” Again, *Genesis* i. c., 4 and 5 v., you will find that God made day and night, viz., “And God saw the light, that it was good : and God divided the light from the darkness. And God called the light day, and the darkness He called night, and the evening and the morning were the first day.”

Having now shown clearly that Scripture and the before-stated opinion of the geologist contradict each other, we may easily imagine how many of the frail-

minded thorough believers in the science of geology are, through its contaminating influences, led blindly on to the reckless choice of holding to geology and renouncing their belief in the holy Scriptures. It is clearly spoken of by our Saviour, *Matthew* vi. c., 24th v., "No man can serve two masters: for either he will hate the one and love the other: or else he will hold to the one and despise the other: ye cannot serve God and Mammon." Neither can any man believe the two statements before related, for he must decide to either believe Scripture and renounce geology, or he must believe geology and renounce the Scriptures, as man cannot hold to them both without acting the hypocrite.

In the latter part of the paragraph before-stated I find that one of the causes that led this scientific gentleman to believe that the centre of our globe is liquid fire is, because he says that the farther and deeper you bore into the earth's crust the hotter it becomes. As a matter of course it is sure to be so, simply because you get farther from the main body of atmospheric air, and consequently the air has farther to travel, and being longer confined, from natural consequences, it becomes warmer in that vicinity the farthest away from the great reservoir of air. Now, to illustrate it, just fancy in the coldest day of winter a person to be shut up in an iron air-tight box, with only just sufficient space to allow fresh air to go in to keep a man alive, and he would then find out that

although everything outside the iron box was covered with ice and snow, yet without any fire he would find it rather warm inside his confined, unventilated apartment; and such are the causes of the air being warmer the farther you go downwards into a pit's workings.

If you were to go down the deepest pit that ever was sunk in the world, and take a piece of rock just broken off from the walls of the workings and place it to your face before it had time to be warmed by the hot and confined air in the pit, you would then find it to be as cold as the rock that is found only ten yards from the surface of our earth's crust.

Then again, the latter part of the paragraph stated by this geologist is a great absurdity, and also a great presumption for man to attempt to say what cannot be proved. He says, "That at the depth of about forty miles, or about the one-hundredth part of the entire distance from the surface to the centre, we should arrive at a temperature of four thousand degrees, and if an egg of a fowl be imagined to represent the earth, its shell would be much too thick to represent its solid crust."

Now as no miner ever bored or sunk a pit's shaft so deep as one mile, how is it known that the earth's crust is only forty miles thick? This science of geology seems to me to have a little of the science of astrology belonging to it, as they are continually shewing us and bringing to light hidden mysteries,

far exceeding in wonders those of the ancient or modern astrologers, soothsayers, or men of deep craft. If, by comparing the solid crust of our earth to the shell of an egg, and even that in proportion to the forty miles' crust is much too thin, how does it happen that so thin a crust, supported on a fluid so mobile, could maintain that general state of stability which characterises it so strongly, as referred to in times ancient and modern, as the type of all that is most solid and most durable?

I shall conclude the remarks and opinion of Dionysius Lardner, D.C.L., on the formation of the earth, by the following paragraph. He says:—

“ In accordance with these results of observation on the strata forming the crust of the earth, and with concurrent evidence deduced from other appearances, it has been inferred, with a degree of probability amounting to moral certainty, that the stratification has resulted from such a series of physical causes as those above described, each stratum, consisting of a series of parallel layers, is assumed to have been a sedimentary deposit precipitated from water, by which the surface of the solid part of the globe has been at former epochs covered; and these waters having become quiescent before retiring, the matter suspended in them was deposited in layers having more or less regularity, their surface being parallel and level, or nearly so. Organic remains of animals have

been found in the superior layers of transition rocks, which present singular interest, as being the earliest examples of life traceable in the growth of the earth. It would seem that after the external parts of the igneous matter had been hardened by the process of cooling, the first sedimentary layers deposited upon it became the habitation of certain races of organised beings."

Now, he says, that after the liquid fire had cooled a little, the strata were placed upon the igneous rocks by a sedimentary deposit precipitated from water; he does not tell us how such quantities of water suddenly made their appearance; nor where it was likely to come from. Also, how did the water become charged with solid matter in small particles so as to be able to precipitate them to the bottom of the water, and become a sedimentary deposit? As a matter of course he does not say, neither does he know; because he makes the assertion as being the fact, and leaves us to puzzle out where it came from. Also, he says, "These waters, after precipitating the layers of deposit, became quiescent before retiring." You see by this that the waters after they had done their work of carrying the layers of deposits, immediately retired and allowed these deposits to become surface. "The deposits," he says, "after the water was gone, were level, or nearly so; also organic remains of animals have been found in the superior

layers of transition rocks." Now it seems to me to be very unlikely to find the remains of animals in these layers of deposit, which by his own account were placed there by being precipitated from water and forming layers in the shape of sediment dropping continually to the bottom of the water till such time as the layers were of sufficient thickness to form the strata found lying above the igneous rocks. Again, he says, "They present singular interest as being the earliest example of life traceable in the growth of the earth." This is a plain acknowledgment that the earth was produced from natural causes (according to his opinion), because he says, the earth grew. Now this part of his statement contradicts the holy Scriptures from the first chapter of *Genesis* to the last chapter of *Revelation*, because every person of importance, both our Saviour, and all His apostles, every patriarch, and every prophet, all, and every one, distinctly tell us that no other made this earth and all things therein besides God Himself; and also we have many instances in Scripture of where God Himself told us, through His servant Moses, that He was the maker of heaven and earth, and all things therein. Now as all true christians and faithful believers know this to be true, I think you will see that in this instance I have not failed to show, as promised in the title of my work, that geology is contradictory when compared with the Scriptures.

I shall now show you, as a finish to my remarks

on the opinions of geologists respecting the origin and formation of the earth, one of the greatest and most extended imaginary opinions you ever heard of; entitled: "The Wonders of Geology; by the Author, Gideon Algernon Mantell, LL.D., F.R.S." This work, by the said author, is very popular and costly, being two volumes of one guinea each. It will be found in most geologists' libraries, and the work contains a thorough explanation of the science of geology with extended ideas of imagination, and hence its title the "Wonders of Geology."

He commences by describing the earth's formation and progress, in very similar terms to the accounts I have quoted on that subject from different authors. I have read his work through, and find it only differs in the extended imaginations, as it simply states what other geologists say respecting the formation and progress of the earth, and as the title of his work is the "Wonders of Geology;" he, to keep good this title, simply enlarges the imaginary parts, which I must confess are somewhat startling. I shall omit making any remarks on the treatise of the first part of his work, and shall commence where he is describing the different strata of the earth. He speaks of some of the strata and says, "That the waters carried elephants, trees, fish, shells, animals of various descriptions, birds, moss, and all kinds of vegetable matter, and left them intermingled with the *débris*; and this mixture of *débris*, leaves, and the before-stated things,

became imbedded in the layers which now are found in some of the rocks and strata of the earth." This is one way by which he accounts for the likeness of different things being found in a fossilised state in the different strata. This geologist, after describing the different strata as to how and where they came from, goes on till he gives us a description of the Wealden and the Sussex coast, viz. :—


"THE WEALDEN.—The tertiary basin of London affords an illustration of the process by which materials are accumulated and organic remains imbedded in an inland sea—that of Paris, of marine and fresh water sediments, deposited in a gulf open to the sea on the one side, and fed by rivers and thermal springs on the other. The Wealden strata are spread over the whole area between the North and South Downs, a tract of country traversed daily by hundreds of intelligent persons from the Metropolis. These peculiar characters were entirely unknown fifteen years ago, the whole group being supposed by geologists to belong to a series of marine clays and sands below the chalk. We found the deltas of rivers to consist of clay or indurated mud, alternating with beds of sand and sandstone (or consolidated sand), and containing leaves, branches, and trunks of trees, fresh water shells, works of art, bones of man, and of land animals, more or less rolled, with boulders formed with fragments of rocks transported by tor-

rents from the hills, or washed out of the banks by the streams.

“Let us now suppose that by agencies already explained a river has disappeared, that the sea also has changed its place, and that the bed and the delta of the river have become dry land ; that towns and villages have been built upon the consolidated delta, and that its surface is either clothed with woods and forests, or under cultivation. If sections of the strata were exposed, either by natural or artificial means, and the bones of men and animals, with works of art, and remains of plants and shells, were visible in the clay or sandstone, such appearances would excite in us no surprise, because we are acquainted with the processes by which such accumulations are formed.

“Should an inhabitant of the new country express his wonder how brittle shells, delicate leaves, and bones, had become imbedded in the solid rock, and if, when we stated the manner in which those changes had been effected, he should not only refuse his assent, but insist that the shells, leaves, and bones, were merely accidental forms of the stones, should we not feel astonished at his ignorance and prejudice ? Yet not a century since such an opinion almost universally prevailed, and is even still entertained by many.

“The Wealden may be considered as covering an area two hundred miles in length from west to east, and two hundred and twenty miles from north-west



to south-east. The total thickness of the Wealden deposits averages about two thousand feet."

By the first part of his statement it appears that for thousands of years no geologist ever offered an opinion as to the formation of the Wealden, because the whole group of geologists, from Adam down to fifteen years before the author wrote this book, supposed it to belong to a series of marine clay and sand below the chalk. How singular that in our day such wonderful discoveries should happen. The secret is simply this, geologists had exhausted all their "Arabian Nights' Entertainments" imaginations on different opinions of geological explorations, and now and then some new discoveries are required to keep up the excitement, and make geology popular, and to appear a great wonder. We have evident proof of this in his own statement, because after this wonderful opinion appeared in print, of finding, as he says, in the consolidated sand, leaves, branches, and trunks of trees, shells, works of art, bones of men, and of land animals, the Wealden was traversed daily by hundreds of the intelligent persons from the Metropolis.

Again he says, "If by accident such fossil remains as described above were to suddenly make their appearance, such appearance would excite in us no surprise, because we are acquainted with the processes by which such accumulations are formed." As a matter of course they are certainly not surprised when a

fossil is shown to them, because you can work your fancy and imagination to so strong a point, that it could, and has in many instances produced death from that simple cause alone. I have no doubt that many a geologist has stared at shells and likenesses of fishes, &c., embedded in different rocks, till he could almost fancy he saw them move.

Again he says, that "If they were to present fossilised shells, leaves, and bones to the inhabitants of the new country, and they were to express their wonder how they had become imbedded in the solid rocks, and if when he had stated the manner in which those changes had been effected, they should refuse to believe us, and insist that the likeness of the before-stated things were merely accidental forms of the stone, should we not feel astonished at his ignorance?" This is a clear proof of the bigotry of geologists; because an honest christian man will not coincide with their opinions, they at once impute it to his ignorance.

He says, "Not a century ago such an opinion (as these fossils being only the likeness of things) almost universally prevailed, and is even still entertained by many." He might well say that many in this nineteenth century believe them to be only accidental forms of the stones, because if there were no works on geology to be found in our libraries, I could venture to say that every man would be of the same opinion; the only reason that so many believe it now

is, because they read the opinions of great men (geologists), and they are obliged to believe it or give up their pursuit of geology altogether. You will find scarcely any one intelligent person who has never read or heard anything about geology, but would, on being asked, give it as his opinion that these fossils the geologists talk so much about are nothing more or less than the accidental shape of the stone, or simply the likeness shaped in stone of whatever it resembles. This is a proof that common sense, till it is prejudiced by these wonder-making geologists, gives a rational and sensible opinion.

Again he goes on to explain further about the Wealden, as follows :—

“By this survey of the strata and organic remains of the Wealden we have acquired data from which, by the principles of induction already explained, we may obtain some conclusions as to the nature of the country from whence these spoils were derived, of the animals by which it was inhabited, and of the vegetables that covered its surface. That country must have been diversified by hill and dale, by streams and torrents, the tributaries of its mighty river; arborescent ferns, palms, and yuccas constituted its groves and forests; delicate ferns and grasses the vegetable clothing of the soil; and its marshes, equiseta, and plants of a like nature prevailed. It was peopled by enormous reptiles, among which the

colossal iguanodon and the megalosaurus were the chief; crocodiles and turtles, flying reptiles and birds, frequented its ferns and rivers, and deposited their eggs on the banks and shoals; and its waters teemed with lizards, fishes, and mollusca; but there is no evidence that man ever set his foot upon that wondrous soil, or that any of the animals which are his contemporaries found there a habitation; on the contrary, not only is evidence of their existence altogether wanting, but from numberless observations, made in every part of the globe, there are conclusive reasons to infer that man and the existing races of animals were not created till myriads of years after the destruction of the iguanodon country—a country which language can but feebly pourtray, but which the magic pencil of a Martin, by the aid of geological research, has rescued from the oblivion of the past, and placed before us in all the hues of nature, with its appalling dragon-forms, its forests of palm and tree-ferns, and the luxurious vegetation of a tropical clime.”

The before-stated opinion is the result of a geological survey of the strata and organic remains of the Wealden. He explains the nature of the country from whence the spoil was derived, also he finds out the animals by which it was inhabited, and likewise the vegetables that covered its surface. How singular that no other science or method can be heard of

whereby such wonders can be found out! See how clearly he knows what kind of animals predominated at that remote period, and also he knows the very place where the crocodiles, and turtles, and flying reptiles deposited their eggs! Certainly this geologist is endowed with a supernatural gift of foresight. Perhaps he was placed under the influence of mesmerism, and when in that temporary state of slumber he travelled in the spirit and discovered, as before-stated, such wonderful things as appear to be past mortal man finding out.

He also says, "That although there were remains of animals, groves, and forests, &c., yet there was no evidence that man ever set his foot on that soil." I suppose in his researches he failed to find any foot-prints of man imbedded in the rocks or sand. He also further says, "That not only is such evidence wanting, but from observations made in all parts of the globe there are conclusive reasons to know that man and the existing races of animals were not created till myriads of years after the destruction of the iguanodon country."

This is another actual proof that geology is contradictory when compared with the Bible, because what true christian believer will ever agree to such direct contradiction, when you read in *Genesis* i. c., 11th and 12th v., "That before the third day in the week not a vestige of a tree, or herb, or grass, had ever been seen; because on the third day He ordered all

of them to be brought forth ; ” and again in the 20th and 21st verse, “ God on the fifth day created and made all the fishes in the sea, and all cattle and winged fowls, and every living creature that is known by man, to be upon the earth.” Now if God made all these things on the third and fifth day, how can this geologist’s account of the state of the country at Wealden be correct, when he positively tells you that myriads of years before this third and fifth days’ work of things created by God Almighty there was to be found there animals, fishes, forests, and all kinds of vegetation. What a pity such books as these are allowed to be read by youths of frail understanding—the result is easily calculated ; you will find that I have given you several examples in the first parts of my work, that such was the result produced by their young minds being biassed from the holy Scriptures by such wonderful imaginations as are found in the works of geology. You will see by the next paragraph that he is describing the stupendous changes that this Wealden (of the Sussex coast in the south-east of England) underwent ; they are certainly of a marvellous nature :—

“ Let us now review the sequence of those stupendous changes, of which our examination of the geological phenomena of the south-east of England has afforded such incontrovertible evidence. From the facts brought before us, we learn that at a period

incalculably remote there existed in the northern hemisphere an extensive island or continent, possessing a climate of such a temperature, that its surface was clothed with coniferous trees, arborescent ferns, and plants allied to the cycas and zamia; and that the ocean which washed its shores was inhabited by turtles and reptiles of extinct genera. This island and its forests suffered a partial subsidence, which was effected in such manner that many of the trees, although torn and rent, still retained their erect position; and the zamia, and a considerable layer of the vegetable mould in which they grew, remained undisturbed. In this state an inundation of fresh water covered the once flourishing forest, and deposited upon the soil and around the trees a calcareous mud, which gradually consolidated into fine limestone; water, holding flint in solution, percolated through the mass, and silicified the now submerged trees and plants. A further depression took place—a body of fresh water, brought down by land floods and rivers, overwhelmed the petrified forest, and heaped upon it accumulations of *débris*, which their parent streams had washed away from the rocks over which they had flowed. The country, traversed by the rivers, like that of the submerged forest, enjoyed a tropical climate; it was clothed with palms, arborescent ferns, and plants allied to the yucca and the dracaena, and tenanted by enormous reptiles, crocodiles, and land and fresh water turtles; and in its waters were various

kinds of fishes, mollusca, and aquatic plants. The bones and teeth of the reptiles, the remains of the turtles, the teeth and scales of fishes, the shells of the snails and mussels, the stems, leaves, and even seed-vessels of the trees, were carried down by the stream, and deposited in the mud of the delta, beneath which the petrified forest was now buried ; this state continued for a long period.

“ Another change took place ; the country and its inhabitants were swept away, and the delta, and the strata on which it reposed, were submerged to a great depth, and formed part of the bottom of a profound ocean, whose waters teemed with myriads of zoophytes, shells, and fishes, of species that are now no more. Thermal waters, holding calcareous and silicious matter in solution, were poured into its basin, and, in its tranquil depths, layers of flint and chalk were deposited, and so rapidly were these changes effected that fishes, while in the act of swimming, were arrested in their progress and became suddenly enveloped in a bed of rock. This epoch was of considerable duration ; at length elevatory movements began to take place, the bottom of the deep was slowly upheaved, and as the elevation continued, the depositions which had formed in the basin of the ocean and had become consolidated, were broken up, and, as they approached the surface, were acted upon by the waves. The chalk strata now began to suffer degradation and destruction, and the

delta of the country of the iguanodon emerged above the waters; and finally, even the ancient petrified forest was brought to view and became dry land. At length some masses rose to an elevation of a few hundred feet above the level of the sea, and formed a group of islands, but, in the depression of the strata beneath the waters, deposits went on from the waste of the cliffs on the sea shores. Large mammalia now inhabited such portions of the former ocean-bed as were clothed with vegetation, and as they died their skeletons were enveloped in the accumulations of mud and gravel which were forming in the bays and estuaries.

“This era also passed away, the elevation continued; other portions of the bed of the chalk ocean became dry land, and at length also those newer strata, in which the remains of the mammoth and the elk, the last tenants of the country, were entombed. The oak, elm, ash, and other trees of modern Europe, sprang up where the palms and tree-ferns once flourished; the deer, boar, and horse ranged where the mighty reptiles once ruled sole monarchs of the country; and lastly, man appeared, and took possession of the soil. At the present time a city stands on the deposits which contain the remains of the elephant and the elk; the huntsman courses, and the shepherd tends his flocks on the elevated and rounded masses of the bottom of the ancient chalk ocean; the farmer reaps his harvests upon the culti-

vated soil of the delta of the iguanodon; and the architect seeks, beneath the petrified forest, for the materials with which to construct his edifices."

I will now make a few remarks on the before-stated opinions on the formation of the sequence of geological changes of the Wealden on the south-east of England. He commences by saying, at a remote period there was an extensive island or continent covered with all kinds of luxuriant growing trees, he even mentions many of their names, and the temperature of the climate, then altogether they suffered a partial subsidence. Now I should like to know what method this gentleman had recourse to, in making such minute calculations, because he appears to be so familiar with the very nature of the island and its contents. It must, by his after-statement, have been billions of ages ago. Now common sense tells us that it is impossible for any mortal man to look back with any certainty to things going on in such remote periods, and what makes it more unlikely is, that he shows by his own statements that this very island and all its contents passed away, which makes it appear very much like the commencement of a fairy tale; in fact, if this account of the changes of the Wealden was printed, and the title was fairly represented as "A Wonderful Fairy Story, suitable for Young Children;" under such a title as the above, I, for one, should have no objection for it to

be read by the young ; but when the same statements are printed as being facts, then I think the time has arrived for the ignorant and unwise to be warned how they are being misled by these geologists, who are so clever that nothing is too difficult a problem for them to solve.

To illustrate this, there is a plate engraving in this very work of Gideon Algernon Mantell, LL.D., F.R.S., showing the marks and lineaments of the earth as seen from the moon. How this wonderful gentleman got the first photographic negative I cannot imagine, because, by the accounts given us by the astronomers, the moon is so far from the earth that if there were any modern mode of conveyance to it, as a matter of course, they could not get one quarter of the way in a man's lifetime ; so that we feel sure no photographer has been up with his instruments to take a negative.

The only way I can see how this gentleman got the impression is, that he must have been in a trance and taken up in the spirit, and saw for himself how it appeared from the moon ; and immediately upon waking up, he must have made a sketch from memory of how it appeared when he was in that exalted position, which no other mortal man ever ventured before.

In referring again to his remarks of the Wealden, he also says, " That in this state an inundation of fresh water covered the once flourishing forest, and deposited upon the soil and around the trees a calca-

reous mud, which consolidated into limestone, and water holding flint in solution percolated through the mass and solidified the trees and plants." By this description he is attempting to account for the fossilised trees and plants found in the lower strata of the Wealden. See how magically he calls forth land, in the shape of an extensive island—then, to suit his imaginations, he pretends it all disappears and becomes covered with fresh water; and that while covered with water, the most unlikely thing to be found in solution in quantities is deposited, viz., flint. This solution of flint settled in the mud, and so changed its nature that both the mud, and the trees and plants imbedded therein, were, as by magic, turned into flint and limestone.

Now we will go on and see what became of the layer he has so ingeniously described. After this layer of mud and trees had become petrified into limestone, he says a further depression took place. Another body of fresh water, brought down by land floods and rivers, overwhelmed the petrified forest, and heaped upon it quantities of *débris*, charged with trees, and palms, ferns, &c., grown at a distance from the Wealden, in a tropical climate; and also the bones of animals, fishes, and reptiles, came along with the flood, and deposited them just over the layer of limestone and its petrified trees. This state, he says, continued for a long period. This is to account for No. 2 layer, or the second strata; because they have

found above the limestone the strata containing likenesses of trees, &c. They cannot see any other way how it could possibly have come there, only in the way described above.

After these two layers are accounted for, and had continued for a long period, he says that—"Another change took place; the country and its inhabitants were swept away, and the delta or strata on which it reposed were submerged to a great depth, and formed part of the bottom of a profound sea or ocean, whose waters teemed with myriads of fishes and shells, and the waters holding calcareous matter in solution, and it being precipitated to the bottom, layers of flint and chalk were deposited, and so rapidly were the changes effected that fishes, while in the very act of swimming, were arrested in their progress, and became suddenly enveloped in a bed of chalk and flint rock."

These are wonderful explanations of how the chalk and flint stratas of the Wealden were formed. It now unmistakably shows some magic performance at work, because not only was the country and its inhabitants swept away and become suddenly submerged so as to form a bottom to a mighty ocean, but they were immediately covered with animal remains, trees, and plants, and myriads of fishes, and the deposits of solutions of flint and chalk must have been instantaneous; because fishes can swim very fast, and if the chalk and flint had not been deposited instantaneously,

fishes would have swam away and avoided the unpleasant position of being imbedded in the flint and chalk strata. How can any christian believer ever read such statements as these without feeling sorry for such weakness? Now, after these inhabitants and its country had been swept away and submerged to form the bottom of a mighty ocean, another change is going to take place, viz. :—"This epoch was of considerable duration; at length elevatory movement began to take place, the bottom of the deep was slowly upheaved, and became surface, and the ancient petrified forest was brought to view and became dry land, some hundred feet above the level of the sea."

You will see that after he has accounted for the chalk, and flint, and limestone formations taking place under water, he is now raising them all up through the water to become surface, because he will show you directly that to suit his opinions they must now be above water to answer certain purposes which could not take place under water. Again, he says, "This era passed away, and as the elevation continued on the tombs of the before-stated remains of elephants, or animals of all sorts, and birds, and fishes, there sprang up the oak, elm, ash, and other trees of modern Europe, and also the deer, boar, and horse ranged the country; and lastly man appeared and took possession of the soil."

Let us see now how far this agrees with common sense and the holy Scriptures. Common sense would

say that the earth would not sink and rise five times, as stated by this account, up to this epoch, to accommodate the fancy of the geologist; and the last time that land rose from the bottom of a mighty ocean he systematically describes that immediately after it was elevated to a proper height all the modern trees and plants flourished and grew amazingly. Now I should like to know, first, how trees could grow in this chalk and flint rock, because just before he elevates the bottom of the sea to become dry land, he tells us plainly that it was chalk and flint at the bottom of the mighty ocean. If so, as soon as it was elevated above the water, as a matter of course, the surface of the earth would then be nothing more or less than a flint rock surface. Now this is the most unlikely layer to be found anywhere to facilitate the luxuriant growth of trees and plants. Also, where did the acorns come from to plant in the flint rock to produce the first oaks? and how could grass grow on flint rock to support our noble horse we pride so much in? If the horse had been so unfortunate as to be there during the time of the first introduction of land brought up from the bottom of a mighty ocean, I, for one, should think his pastures were very short and meagre.

Again, he says man, at this very juncture, made his appearance. This seems to me to be one of the most fatal contradictions to Scripture ever before recorded, because he shows by the before statements

how land made its own appearance; also how the trees, plants, &c., produced themselves from nothing, and also animals of every description made their appearance by a systematic course of nature; and lastly, he says, man made his appearance in the same way. Never once does he ever say that either the earth, its contents, animals, fishes, birds, or man, were made or created by God. This is the sum and substance of the errors and folly of geologists by ascribing the introduction of this earth and man to the mere chances of natural causes.

Now after hearing such a loose statement of the opinion of how the earth and man appeared, I shall refer you for contradiction to these wild and unauthenticated statements to the first and second chapters of *Genesis*, after reading those chapters, and a hundred proofs besides, in the holy Bible, I have not the slightest doubt that all christians will see at a glance, that in this, and what I have stated before, I have not failed to show that geology is contradictory when compared with the Scriptures.

This gentleman goes on to show the accuracy of his before-stated opinions of the formation of the Wealden coast, by comparing, as he says, in a more impressive form, the metaphor of a celebrated Arabian writer, which is as follows:—

“Such is a plain enunciation of the results of our investigations; but I will embody these inductions

in a more impressive form by employing the metaphor of an Arabian writer, and imagining some higher intelligence from another sphere, to describe the physical mutations of which he may be supposed to have taken cognisance, from the period when the forests of Portland were flourishing to the present time. 'Countless ages ere man was created,' he might say, 'I visited these regions of the earth, and beheld a beautiful country, of vast extent, diversified by hill and dale, with its rivulets, streams, and mighty rivers, flowing through fertile plains; groves of palms and ferns, and forests of coniferous trees, clothed its surface; and I saw monsters of the reptile tribe, so huge that nothing among the existing races can compare with them, basking on the banks of its rivers and roaming through its forests; while in its ferns and marshes were sporting thousands of crocodiles and turtles, winged reptiles of strange forms shared with birds the dominion of the air, and the waters teemed with fishes, shells, and crustacea. And after the lapse of many ages I again visited the earth, and the country with its innumerable dragon-forms, and its tropical forests, all had disappeared, and an ocean had usurped their place, and its waters teemed with nantili, ammonites, and other chephalopoda, of races now extinct, and innumerable fishes and marine reptiles. And thousands of centuries rolled by, and I returned, and lo! the ocean was gone, and dry land had again appeared, and it was covered with groves

and forests ; but these were wholly different in character from those of the vanished country of the iguanodon ; and I beheld, quietly browsing, herds of deer of enormous size, and groups of elephants, mastodons, and other herbivorous animals of colossal magnitude ; and I saw in its rivers and marshes the hippopotamus, tapir, and rhinoceros ; and I heard the roar of the lion and the tiger, and the yell of the hyena and the bear. And another epoch passed away, and I came again to the scene of my former contemplations, and all the mighty forms which I had left had disappeared, the face of the country no longer presented the same aspect, it was broken into islands, and the bottom of the sea had become dry land, and what before was dry land was sunk beneath the waves ; herds of deer were still to be seen on the plains, with swine, and horses, and oxen ; and wolves in the woods and forests ; and I beheld human beings clad in the skins of animals, and armed with clubs and spears, and they had formed for themselves habitations in caves, constructed huts for shelter, enclosed pastures for cattle, and were endeavouring to cultivate the soil. And a thousand years elapsed, and I revisited the country, and a village had been built upon the sea-shore, and its inhabitants supported themselves by fishing, and they had erected a temple on the neighbouring hill, and dedicated it to their patron saint, and the adjacent country was studded with towns and villages, and the downs were covered with

flocks, and the valleys with herds, and the corn-fields and pastures were in a high state of cultivation, denoting an industrial and peaceful community. And lastly, after an interval of many centuries, I arrived once more, and the village was swept away, and its site covered by the waves ; but in the valley and on the hills above the cliffs a beautiful city appeared, with its palaces, its temples, and its thousand edifices, and its streets teeming with a busy population in the highest state of cultivation, the resort of the nobles of the land, the residence of the monarch of a mighty empire, and I perceived many of its intelligent inhabitants gathering together the vestiges of the beings which had lived and died, and whose very forms were now obliterated from the face of the earth, and endeavouring, by these natural memorials, to trace the succession of those events of which I had been the witness and which had preceded the history of their race.' ”

Having concluded Gideon Algernon Mantell's, LL.D., F.R.S., opinion and remarks on the Wealden, I shall now venture to make a few remarks on the fairy-like statements of this wonderful account of the Wealden. It certainly seems to me as though a man had just woke up from an enchanting dream, and, while fresh in his memory, was relating the whole of the sights he saw in fancy ; but how different it is found in this instance, because what I have shown to

you is not represented as a supposed dream, or the mere fancy of imagination, but is stated as real fact, being the opinion of one of the stars of geology, a man looked up to as the source of light to the science of geology. Now if these great and important men make such vivid mistakes in their opinions of the origin of things, what blunders and senseless opinions we may expect from a man less learned in the science of geology. It comes to what I have stated in the first part of my work, showing that geology is in many cases infidelity, when studied by frail and light-minded young gentlemen; because there would be no harm in anyone reading the works of geology if they would read them with the same interest that one has in reading a fairy tale, or the "Arabian Night's Entertainments," or any other wonderful story, composed only to please and amuse its readers, and not, like geology, composed with the strong idea and belief that the reader will become a convert to the science. Geology is not advanced under the title of a fable, but contra.—under the title of facts strongly recommended for the instruction of the young man. I have no objection to the geologist wasting his valuable time in such folly as in searching the different strata of the earth with the hope of discovering some fossil or likeness of a tree, or fish, or anything else, because when they find in the flint rock a piece of flint which they think resembles (with the aid of imagination) a shark's tooth, &c., if that was the

only mischief, I, for one, should not find fault with them, but only silently smile at their folly; but when I find, after they have discovered this imitation of a shark's tooth and other likenesses of things in the flint and chalk seams of the Wealden, that it leads them madly on to venture such alarming and wonderful statements of their views as to the formation of that seam as we have heard in the before-stated opinion of this geologist, then I say it is time to speak against and find fault with such publications, because we, as christian believers, know that it is undermining the belief in the holy Bible.

If you refer to my statements in the first part of this work, you will there see that from my own experience I can vouch for geology being the great source of injury to the minds of young men in leading them to believe in geology rather than the truth of the holy Scriptures. Such has been my personal experience when coming in contact with thorough believers in geology; and, knowing this to be the case, I should not be discharging my duty to my fellow-men if such was not exposed; hence this is the reason for showing my humble opinion on geology.

I shall now relate a circumstance which came within my notice and hearing some six years ago. I can vouch for the accuracy of the statement, and can positively say it is a real fact, it being said in my presence; and also there were present four more gen-

tllemen, who are all alive, and would speak to the authenticity of the same. I relate this anecdote simply to show that they are the very words of a converted geologist, who unmasked the secret which is connected with that branch of the science of judging and forming an opinion as to the age and antiquity of different kinds of rocks and strata of the earth. The gentleman alluded to has told the very same anecdote to two other gentlemen residing in Hales Owen, who only mentioned it to me last week, so that I know now six gentlemen, besides myself, who heard with delight the exposure of one of the follies connected with that useless science, geology.

Myself and partner, six years ago, were in the habit of going to Birmingham every Thursday, and, as a rule, we dined at the Queen's Head Inn, at one o'clock, every week. Seldom more than us two dined there, except the worthy host and his family; but as soon as dinner was over it was the habit of several gentlemen (gunmakers) to join us with a glass and a bit of chat till about three o'clock; as myself and my brother established this as a rule, parties who wanted to see us about any special business knew where to find us between the hours of one and three o'clock. It happened on the day in question that after dinner several gentlemen came in to enjoy our company and a glass at the same time, when one of the gentlemen happened to pick up a piece of stone with (to all appearance) small fossil shells in it, which had been placed on the

mantel-piece for ornamentation. He was very silent for a considerable time; at last someone in the room asked him what he was meditating upon, when, on being accosted, he directly said, "I was just then wondering how these fossil remains had become embedded in this stone, and also how long it had been since these fossil remains had ceased to live and move about." Now that was a very good key-note to pitch, and there was soon an argument commenced from it on geology. I don't know whether this gentleman stated his wonder at the appearance of the fossilised stone on purpose to commence an argument, but all I know is that one very soon commenced, and a very warm one, too, I can assure you; and when the supposition was once mooted by the gentleman who had been examining the piece of stone, it was not allowed to pass without notice, because it happened that one of the gentlemen in company was a thorough believer in geology, and he soon commenced the subject by offering an opinion as to what it was and where it came from, and also the time it commenced to be fossilised, and how many years it took to accomplish the perfecting of the fossils. He did not know that I was a disbeliever in the science of geology, so I let him go on without contradiction till he had emptied all his store of knowledge respecting the cause and antiquity of the fossilised stone; then I spoke, and told him that my opinions regarding what he had been stating were diametri-

cally opposed to his. You should have seen his astonishment on hearing me pronounce those words. He had been fancying that he was sailing in smooth waters, but all at once it had become stormy. We immediately set to and commenced an argument, till at last I silenced him for a time. He called for another glass, and immediately commenced firing away at me again, when in the midst of our second dialogue who should come in but the very identical gentleman who is the important subject of this anecdote. He sat down, and called for his glass, and when all was quiet this obstinate geologist commenced his attack on me again, little thinking that the gentleman who had just entered the room was a friend to my views; but he soon found it to be so, to his utter astonishment, because this gentleman, after hearing our contention for some time, said, "Now just allow me to relate a fact that will soon settle the question as to the stability of your argument in favour of geology, and I have no doubt, after you have heard my experience in the matter, you will change your views and opinion on the subject."

He commenced by saying, "I am a man of considerable experience in matters of difficulty, and also I am a large manufacturer, carrying on an extensive business in Birmingham. I have seen the time when I should have concurred in your opinions upon the same views you hold in this contention, as I should have supported the science against any attack that

might have been made upon it ; but I am proud now to say that the folly of such a thing has passed away, and wiser and more useful things engage my attention. If you will allow me I shall feel a pleasure in relating to you the very incidents that have proved so beneficial to me, by causing my eyes to be opened, and myself to be converted to a rational belief in things of creation, and to be also shown at one glance that the folly and presumption put forth by geologists is contrary to my new-born ideas. When I was young, my parents being anxious to place me in a good position in life, knew it was necessary to carry out that idea by having my education perfected by learning—classics, algebra, drawing, and also all the sciences, amongst which my favourite was geology. I persevered at school till I soon mastered the theory, and read all the works of high standing upon that science. In fact, I became so well versed in it, and so fond of it, that on leaving school I joined the Geological Society, knowing that would be a proper way to get a practical knowledge of the science. The Society soon found that my knowledge of the science, in theory, was very great, and they said all that was wanted to complete my education in the science was the practical knowledge. My parents, being anxious and desirous that I should become proficient, and make a mark as a scientific man, furnished me with a satchel filled with the requisite tools for explorations, and upon that I immediately made my first journey of

exploration. For months during the summer season I went to various places where the exposed rocks and strata of earth were to be found, and then I used to take out my chisels and hammers and make notes on the different pieces of specimens that I found interesting, and at night, when I returned home, my time was occupied in entering them in a book, because I had to write down my opinions between the meeting days, and at the next meeting of the society I used to read a paper, with a full statement of my opinions on my explorations. This I did for a whole season, and they eulogised me and spoke of me as a promising scholar, and likely some day to shine and become an ornament to the science. It all went well till the next summer, when this fortunate revelation took place which prevented me from wasting such valuable time on the ridiculous pursuit of exploration. It happened thus :—I started off one morning very early, being intent to make a good day's work and to finish my survey of a certain district. About mid-day I perceived a great hill in the distance that the railroad was going to pass through. As I neared it, it was plain to be seen that the navigators were at work and had nearly cut the road through, in open work. I said to myself here is a rare chance for me to explore and finish up my day's labours. I took out my tools and commenced at once to examine and take notes of the different layers that presented themselves. I confess, that it was somewhat puzzling to describe and

form my opinion on some of the layers, but at last I made a finish, and took samples of some of the important seams, and also noted down the antiquity, as to the probable age each layer had taken to produce the appearance it then had. All the time that I was busy at my work, which lasted nearly two hours, I noticed a very old man following me about, but always keeping a respectful distance. At last I finished, and packed up all my newly-gained store of knowledge, and made my way in the direction of the old man. When I came up to him I thought, as he had been watching me all the time, I should like to know his object for doing so; and upon that I accosted him and commenced the following dialogue, which has proved so useful a lesson to me. I said, "My good old gentleman, what line is this intended for?" and he told me immediately. I asked him many other commonplace questions, and received answers accordingly. At last the old gentleman asked me if I had any objection to tell him what I had been so busily engaged in during the last two hours. I said "Certainly not," and immediately commenced relating the whole of the incidents connected with my day's journey, and also what I had been exploring in the layers of this deep cutting. I being a young man, about twenty-two years of age, felt proud in giving information to a man so much my senior, for although he was so old, he had not the slightest idea of geology. I flourished away at a great rate, and commenced

describing my opinion of the different layers I found in the cutting; and also I told him from the notes I had written how long I supposed it had taken to produce the changes so evident to be seen. I also stated that I supposed it had taken thousands of years to produce some of the blackest and most solidified layers. When I had finished my statement and opinion as to the supposed age of the strata of the hill, I thought I should like to know and hear the old man's opinion respecting the age and composition of the hill and strata in question; so I said to him, "Now, old gentleman, you have heard my opinions respecting the age of these layers or seams in this cutting, I should now like to hear before I go, how old you suppose they are, and how long it would take for the different layers to be acted upon by chemical changes, &c., so as to produce the present found seams?" The old gentleman looked at me, and began to scratch his head, and said, "Let me see, Why, sir, when I was about seven years old I recollect very well playing with other boys at kicking football just on the spot where this mount stands; it was then a beautiful green field, and all around was the same. Let me see, I am now eighty-five, and take seven years from that it must be about seventy odd years since this hill was put here." At this revelation I became almost paralysed, and said to him, "My good man, will you be kind enough to tell me how this hill came here?" "Of course," he says.

"Why, just after I was seven years old they began to sink those pair of pits yonder, and they brought all the stuff out of the sinking of the shafts and put it down here, and at the same time those works brought all their refuse, and put it on the mount, that causes different colours in the layers, and the different sorts out of the pit, that also made different kinds of layers, and that's all I know about how this hill came here." I said, "Good day, old gentleman," and off I went; but as soon as I was out of sight I took my satchel off my back, and emptied all my specimens of geological labours and researches on to the ground, and said good-bye to geology. I went home and burnt every atom of paper connected with my late researches. I also wrote and sent in my resignation to the Geological Society, and made a solemn vow that I would never more waste another hour in such folly and deception as experienced by the lesson taught me by that illiterate old man. This is how I became converted to a rational state of understanding, and I assure you, gentlemen, that I have blessed that old man hundreds of times for the useful lesson he so innocently taught me. This gentleman's anecdote had such an effect upon my friend, the geologist, that he has never since attempted an argument with me on that subject.

The above gentleman, who told the anecdote of how he became converted from geology to rationality, is now living in Birmingham, and a man of high

standing, being chairman of a fine institution, and making his way as a first-class tradesman, an ornament to society, just snatched from the contaminating influence of that useless science, geology, at an early age; giving him time to show the example of what reformation and forsaking your follyful ways can do for a man who is willing to give it a trial. I sincerely hope that this lesson will prove beneficial in showing (as it did the gentleman alluded to above) that as long as there is life there is hope, and also as long as a man is alive he can alter his will.

CONCLUDING REMARKS.—With these remarks I conclude this attempt to prove, by my comparison of geology with common sense and the holy Bible, that they are diametrically opposed to each other; and if I have succeeded in proving that geology is contradictory when compared with the holy Bible, and also common sense, and have explained in a satisfactory manner how they disagree with each other; if so, I have then accomplished my long-cherished object; and if I have removed but from one intelligent mind any doubt, and been so fortunate as to kindle in his heart the choice of his future belief in the holy Scriptures in preference to geology; if this is only accomplished by my exhortations and explanations, then I shall be proud of my small efforts, and shall feel doubly repaid for this undertaking. I earnestly wish, by my explanations and opinions, to kindle in the

hearts of others that intense and endearing love which I feel in my own, for the truth of the holy Bible; and if that intellectual light is once kindled that illumines the mental vision it will be difficult to be extinguished by that opposing enemy (the science of geology). I also further hope that when this small work is read by geologists, it will serve them as a reminder (when they are about to make some further startling assertions on the origin of things of creation), not to extend their opinions and imaginations to such extent as we find in all the modern works on Geology; but always, in forming their future opinions on anything belonging to creation, to be careful that they harmonise with that truthful book the holy Bible. If this, and the conversion of some geologists should take place through the instrumentality of this publication, I shall indeed rejoice, for then my exertions will not have been in vain; and although my humble name may be soon forgotten, and all record of my labours be effaced, yet the influence of that knowledge, however feeble it may be, which has emanated from my humble opinion, as here set forth, will solace and comfort me in my pilgrimage through life; and when we have left this earth (as to the origin of which we are contending) and taken possession of our mansion above, then, and not till then, will any one person be able to find out the works of creation: *Ecclesiastes* iii. c., 11th v., "He hath made everything beautiful in his time; also He hath set the world in

their heart, so that no man can find out the work that God maketh from the beginning to the end." Also *Ecclesiastes* viii. c., 17th v., "Then I beheld all the work of God, that a man cannot find out the work that is done under the sun; because though a man labour to seek it out, yet he shall not find it; yea, farther: though a wise man think to know it, yet shall he not be able to find it."

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